CHAPTER 459
HAZARDOUS MATERIALS

REGULATION OF HIGHLY HAZARDOUS SUBSTANCES AND EXPLOSIVES

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Definitions

NAC 459.952 Definitions. (NRS 459.3818) As used in NAC 459.952 to 459.95528, inclusive, unless the context otherwise requires, the words and terms defined in NAC 459.95211 to 459.95314, inclusive, ***and new definitions in italics*** have the meanings ascribed to them in those sections.

NAC 459.95211 "Accidental release" defined. (NRS 459.3818)
1. "Accidental release" means:
(a) An unintentional discharge from a process of any amount of a ***highly hazardous*** substance into the air, water or land, including, without limitation, any unintentional discharges within a building that encloses a process; or
(b) A fire or an explosion at a facility involving a ***highly hazardous*** substance or explosive.
2. The term does not include emissions of highly hazardous substances from piping component threaded connections, valve and equipment packing, or malfunctioning pollution control devices unless such an emission would qualify as a catastrophic release.

NAC 459.95213 "Active mitigation" defined. (NRS 459.3818) "Active mitigation" means equipment, devices or technologies that work with human, mechanical or other sources of energy, and function to contain or minimize the consequences of an accidental release.

NAC 459.95215 "Administrative controls" defined. (NRS 459.3818) "Administrative controls" means written procedural mechanisms that are used to control a hazard.

NAC 459.95225 "C.A.P.P." defined. (NRS 459.3818) "C.A.P.P." means the chemical accident prevention program for the State of Nevada and encompasses the provisions of NRS 459.380 to 459.3874, inclusive, and NAC 459.952 to 459.95528, inclusive***, and the new sections in italics***.

NAC 459.9523 "C.A.S." defined. (NRS 459.3818) "C.A.S." means the Chemical Abstracts Service.

NAC 459.95235 "Catastrophic release" defined. (NRS 459.3818) "Catastrophic release" means ***an*** uncontrolled emission, fire or explosion involving one or more ***highly hazardous*** substances or explosives that presents imminent and substantial endangerment to the health of the employees, the public health or the environment. The term includes events that occur within a building or other structure that contains the substance or explosive.

NAC 459.9524 "Division" defined. (NRS 459.3818) "Division" means the division of environmental protection of the state department of conservation and natural resources.

NAC 459.95242 "Emergency response program" defined. (NRS 459.3818) "Emergency response program" ***means the procedures and practices that are*** developed ***and implemented*** pursuant to NAC 459.9544 and 459.95442 **.**

NAC 459.95244 "Endpoint" defined. (NRS 459.3818) "Endpoint" means the toxic concentration, ambient overpressure, radiant heat level or lowest flammable gas concentration achieved at the outer geographical boundary of the off-site consequence analysis.

NAC 459.95246 "Environmental receptor" defined. (NRS 459.3818) "Environmental receptor" means:
1. A national or state park, forest or monument;
2. An officially designated wildlife sanctuary, preserve, refuge or area; or
3. A federal wilderness area,
which can be identified on a local map prepared by the United States Geological Survey and which could be exposed to toxic concentrations, radiant heat or overpressure greater than or equal to the endpoints set forth in NAC 459.95364 as a result of an accidental release.

"Explosive" defined. (NRS 459.3818) "Explosive" means a chemical classified as an explosive pursuant to subsections 2 and 3 of NAC 459.9533.

NAC 459.95247 "Explosives manufacturing operation" defined. (NRS 459.3818) "Explosives manufacturing operation" means a process that involves the manufacture of explosives for sale ***even if highly hazardous substances are also*** used in the explosives manufacturing operation. The term includes ***the manufacture of devices containing explosives and*** explosive storage sites that are incidental to the manufacture of explosives for sale.

NAC 459.95248 "Facility" defined. (NRS 459.38075) "Facility" ***has the meaning ascribed to it in NRS 459.38075.***

NAC 459.9525 "Field gas" defined. (NRS 459.3818) "Field gas" means gas that is extracted from a production well before the gas enters a natural gas processing plant.

"First responding fire station" defined. (NRS 459.3818) "First responding fire station" means the local fire department station that typically responds to emergency calls from a facility and is usually the station that is first on the scene during an emergency.

NAC 459.95252 "Hazard assessment" defined. (NRS 459.3818) "Hazard assessment" means an evaluation of the potential on-site and off-site consequences of an accidental release that an owner or operator develops pursuant to NAC ***459.95364 to 459.95376,*** inclusive.

"Hazardous materials response station" defined. (NRS 459.3818) "Hazardous materials response station" means a local fire department station that is equipped and trained to provide a hazardous materials response to a facility in accordance with 29 C.F.R. § 1910.120(q).

"Highly hazardous substance" defined. (NRS 459.3818) "Highly hazardous substance" means a chemical listed in subsection 1 of NAC 459.9533, regardless of the amount or quantity of the chemical present.

NAC 459.95256 "Hot work" defined. (NRS 459.3818) "Hot work" means work involving electric or gas welding, cutting, brazing, or similar flame-producing or spark-producing operations.

NAC 459.95259 "Local building official" defined. (NRS 459.3818) "Local building official" means the governmental entity charged with the administration and enforcement of local building codes.

NAC 459.95263 "Medical treatment" defined. (NRS 459.3818) "Medical treatment" means treatment, other than first aid, that is administered by a physician or other personnel pursuant to standing orders from a physician.

NAC 459.95265 "Mitigation" and "mitigation system" defined. (NRS 459.3818)
"Mitigation" or "mitigation system" means activities, technologies or equipment specifically designed or deployed to***:***
1. Capture or control a substance upon loss of containment in order to minimize exposure of the ***employee, the*** public or the environment***; or***
2. Minimize the impact of a fire or explosion on the employee, the public or the environment.

NAC 459.95267 "N.A.I.C.S." defined. (NRS 459.3818) "N.A.I.C.S." means the North American Industry Classification System.

NAC 459.95269 "Natural gas processing plant" defined. (NRS 459.3818) "Natural gas processing plant" means a processing site that:
1. Is engaged in:
(a) The extraction of natural gas liquids from field gas;
(b) The fractionation of mixed natural gas liquids to natural gas products; or
(c) Both extraction and fractionation; and
2. Is classified as N.A.I.C.S. code 211112, which is adopted by reference pursuant to NAC 459.95528.

NAC 459.952695 "New process" defined. (NRS 459.3818) "New process" means a process that has been, or will be, installed at a facility and will be in operation for the first time at that location. The term includes, without limitation, a new explosives manufacturing operation.

NAC 459.95271 "N.F.P.A." defined. (NRS 459.3818) "N.F.P.A." means the National Fire Protection Association.

NAC 459.95273 "Off-site" defined. (NRS 459.3818) "Off-site" means an area:
1. Beyond the property boundary of the facility; and
2. Within the property boundary to which the public has routine and unrestricted access during or outside business hours.

NAC 459.95275 "Owner or operator" defined. (NRS 459.3818)
"Owner or operator" means ***any natural person, business or social organization or other legal entity, including, without limitation, a corporation, partnership, association, trust or unincorporated organization, who owns, leases, operates, controls or supervises a facility that contains any process subject to C.A.P.P.***

NAC 459.95277 "Passive mitigation" defined. (NRS 459.3818) "Passive mitigation" means equipment, devices or technologies that work without human, mechanical or other sources of energy, and function to contain or minimize the consequences of an accidental release.

NAC 459.95279 "Prevention program" defined. (NRS 459.3818) "Prevention program" means procedures and practices that are developed and implemented pursuant to NAC 459.95412 to 459.95435, inclusive ***.***

NAC 459.95281 "Process" defined. (NRS 459.3809) "Process" means ***:***
1. Any activity that involves a ***highly hazardous substance or an explosive,*** including, without limitation, the use, storage, manufacturing, handling or on-site movement ***, or any combination thereof,*** of such a substance or ***explosive.***
2. A group of vessels that are used in connection with such activity, including vessels that are:
(a) Interconnected; or
(b) Separate, but located in such a manner that a highly hazardous substance or explosive could potentially be released, including, without limitation, a release, fire or explosion in one vessel that could cause a release, fire or explosion in another vessel.

NAC 459.95283 "Process hazard analysis" defined. (NRS 459.3818) "Process hazard analysis" means the analysis performed pursuant to NAC 459.95414.

NAC 459.95285 "Produced water" defined. (NRS 459.3818) "Produced water" means water that is:
1. Extracted from the earth from an oil or natural gas production well; or
2. Separated from oil or natural gas after extraction.

NAC 459.95289 "Public" defined. (NRS 459.3818) "Public" means one or more natural persons other than employees or contractors of a facility.

NAC 459.95291 "Public receptor" defined. (NRS 459.3818) "Public receptor" means an offsite:
1. Residence;
2. Institution such as a school or hospital;
3. Industrial, commercial or office building; or
4. Park or recreational area, that is inhabited or occupied by the public without restriction by the facility, in which the public could be exposed as a result of an accidental release to toxic concentrations, radiant heat or overpressure.

"Replacement in kind" defined. ***(NRS 459.3818) "Replacement in kind" means a replacement of equipment, instruments, procedures, raw material and processing conditions that satisfy the design specifications.***

NAC 459.95297 "Threshold quantity" defined. (NRS 459.3818) "Threshold quantity" means the quantity ***of highly hazardous substance*** specified in ***subsection 1 of*** NAC 459.9533***.***

NAC 459.95312 "Vessel" defined. (NRS 459.3818) "Vessel" means ***has the meaning ascribed to it in NRS 459.38125.***

The following three new sections have been added and as yet are uncodified (no NAC numbers have been assigned)

RMP Adoption (NRS 459.3833)

1. The provisions of this section apply only during periods when federal authority is delegated to the Division pursuant to Subpart E of 40 C.F.R. Part 63.
2. Upon receiving delegation of federal authority pursuant to Subpart E of 40 C.F.R. Part 63, the Division shall administer and enforce the provisions of 40 C.F.R. §§ 68.3 to 68.215, inclusive, and Appendix A of 40 C.F.R. Part 68, which are hereby adopted by reference.
3. A copy of the volume that contains 40 C.F.R. §§ 68.3 to 68.215, inclusive, or Appendix A of 40 C.F.R. Part 68 can be obtained from the Superintendent of Documents, P.O. Box 371954, Pittsburgh, Pennsylvania 15250-7954, at a cost of $29. These sections are also available, free of charge, from the Government Printing Office at the Internet address <http://www.gpoaccess.gov>.

Protection of Confidential Information (NRS 459.3822)

1. The Division shall, in accordance with this section and NRS 459.3822, protect the confidentiality of any information that is obtained pursuant to C.A.P.P., including any information obtained through an observation made by the Division during a visit to a facility.
2. To protect the confidentiality of information, the owner or operator of the facility must request such protection in writing, indicating which information is to be protected and stating how the conditions in NRS 459.3822 are satisfied.
3. A request for, and the granting of, the protection of the confidentiality of information made pursuant to this section does not constitute a request for, or the granting of, an extension of any deadlines for reporting required pursuant to C.A.P.P., and the pending status of such a request does not prohibit access to the information or facility by the Division.
4. In addition to providing the confidential information to the Division, the owner or operator of the facility for which protection of the confidentiality of information is obtained pursuant to this section shall, upon the request of the Division, provide a redacted version of any submitted information that is intended for public review which substitutes the term "CBI" or provides generic information for the information deemed confidential.

Incident Investigation by the Division (NRS 459.38195)

1. The Division may investigate an accident occurring in connection with a process that involves one or more highly hazardous substances or explosives at a facility which results in an uncontrolled emission, fire or explosion and which presents or presented an imminent and substantial danger to the health of the employees of the facility, the public health or the environment, to determine the cause of the accident if the owner or operator of the facility:

(a) Is unwilling to commence and has not commenced an investigation of the accident in a timely manner; or

(b) Is not capable of conducting an investigation and has not retained persons who have expertise to conduct an investigation of the accident.

2. Except as otherwise provided in subsection 3, before the Division commences an investigation of an accident, the Division must provide written notice to the owner or operator:

(a) Defining the scope of the investigation;

(b) Citing the Division's authority and the reasons pursuant to subsection 1 for conducting the investigation;

(c) Providing an explanation of how the Division's costs will be recovered; and

(d) Informing the owner or operator that if the owner or operator fails to commence an investigation of the accident within 24 hours after receiving the written notice, the Division will commence its investigation of the accident and begin accruing costs.

3. The provisions of subsection 2 do not preclude the Division from commencing its investigation immediately if the Division determines that time is of the essence in gathering data.

4. The decision by the Division to conduct an investigation pursuant to this section does not relieve the owner or operator of the obligation to investigate pursuant to NAC 459.95429.

5. Except as otherwise provided in subsection 6, the Division shall accrue costs for the investigation and invoice the owner or operator the following amounts:

(a) For activities conducted by personnel of the Division, the amount of $68 per hour;

(b) For activities conducted by contractors, an amount equal to the cost to the Division; and

(c) Such other amounts as are necessary for the Division to recover all costs incurred by the Division in conducting the investigation.

6. In no event may the total amount invoiced by the Division pursuant to subsection 5 for an investigation exceed the total costs incurred by the Division in conducting the investigation.

7. An investigation conducted by the Division pursuant to this section shall be deemed complete when, to the satisfaction of the Division:

(a) The direct cause of the accident and each contributing cause or potential cause of the accident has been identified;

(b) Each root cause of the accident, or each potential root cause, has been identified;

(c) The remedial steps to prevent recurrence of the accident have been identified; and

(d) The remedial steps so identified have been implemented.

8. As used in this section:

(a) "Direct cause of the accident" means the condition or event that resulted in the accident.

(b) "Expertise to conduct an investigation" means having technical or operational knowledge plus knowledge of investigative techniques to make a determination of the direct, contributing and root causes of an accident.

(c) "In a timely manner" means to start the investigation process with a formally defined investigation team within 48 hours after the accident.

(d) "Is not capable of conducting an investigation" means that the owner or operator does not have the expertise to conduct an investigation within the group of employees and contractors of the owner or operator.

(e) "Root cause of the accident" means a condition or event that, if corrected, would prevent recurrence of the accident.

Applicability

NAC 459.95321 Determination of program tier. (NRS 459.3818) The owner or operator shall, pursuant to NAC 459.95321, ***459.95323 and 459.9533,*** determine for each process within the boundary of his facility ***if*** the process is subject to ***C.A.P.P.***

NAC 459.95323 ***Criteria for Applicability Determination*****. (NRS 459.3818)**
1. Except as otherwise provided in NAC 459.95486, a process is subject to ***C.A.P.P. if:***
(a) The process is not exempted pursuant to NRS 459.3814 and ***the process contains*** a ***highly hazardous*** substance in a quantity:

(1) Equal to or greater than the amount ***set forth*** in ***subsection 1 of*** NAC 459.9533 under the column labeled ***"*** Threshold Quantity"; or

(2) Less than the amount ***set forth*** in ***subsection 1 of*** NAC 459.9533 under the column labeled ***"*** Threshold Quantity" if there are two or more releases of one or more ***highly hazardous*** substances from the facility during a 12-month period and the quantity for each release is in excess of the amount ***set forth*** in ***subsection 1 of*** NAC 459.9533 for the ***highly hazardous*** substance under the column labeled "Two Release ***Quantity"; or***

(b) The process is an explosives manufacturing operation.
2. The following highly hazardous substances need not be considered when determining whether at least a threshold quantity is present in a process for the purposes of subsection 1:
(a) A substance denoted as toxic if the concentration of the substance in a mixture is less than 1 percent by weight of the mixture. Except for oleum, toluene 2, 4-diisocyanate, toluene 2, 6-diisocyanate and toluene diisocyanate (unspecified isomer), if the concentration of the toxic substance in the mixture is 1 percent or greater by weight of the mixture and the owner or operator demonstrates in writing that the partial pressure of the substance in the mixture under handling or storage conditions in any portion of the process is less than 10 millimeters of mercury, the amount of the substance in the mixture in that portion of the process need not be considered when determining whether at least a threshold quantity is present in the process. A toxic substance is designated as "T" in the table in subsection 1 of NAC 459.9533 under the column labeled "Tox (T) or Flam (F)."
(b) Except as otherwise provided in paragraphs (c) and (d), a substance denoted as flammable if the concentration of the substance in a mixture is less than 1 percent by weight of the mixture or the concentration of the flammable substance in the mixture is 1 percent or greater by weight of the mixture and the owner or operator demonstrates in writing that the mixture does not have a flammability hazard rating of "4" as described in N.F.P.A. 704: Standard System for the Identification of the Hazards of Materials for Emergency Response, which is adopted by reference pursuant to NAC 459.95528. If the concentration of the flammable substance in the mixture is 1 percent or greater by weight of the mixture and the owner or operator does not demonstrate that the mixture does not have a flammability hazard rating of "4," the entire weight of the mixture must be treated as the flammable substance to determine whether a threshold quantity is present at the facility. The boiling and flash point must be defined and determined pursuant to N.F.P.A. 30: Flammable and Combustible Liquids Code, which is adopted by reference pursuant to NAC 459.95528. A flammable substance is designated as "F" in the table in subsection 1 of NAC 459.9533 under the column labeled "Tox (T) or Flam (F)."
(c) Gasoline if it is distributed or stored for use as fuel for an internal combustion engine.
(d) A naturally occurring hydrocarbon mixture before such a mixture has entered into a natural gas processing plant or a petroleum refining process unit. A naturally occurring hydrocarbon mixture includes any combination of condensate, crude oil, field gas and produced water.
(e) A substance that is contained in an article.
(f) A substance when it is being used:

(1) As a structural component of the facility;
(2) With products for routine janitorial maintenance;
(3) By employees in foods, drugs, cosmetics or other personal items;
(4) In process water or noncontact cooling water drawn from the environment or municipal sources; or
(5) In air as compressed air or as part of combustion.

(g) A substance that is manufactured, processed or used in a laboratory at a facility under the supervision of a technically qualified individual as defined in 40 C.F.R. § 720.3(ee). This exemption does not apply to:

(1) Specialty chemical production;
(2) The manufacturing, processing or use of a highly hazardous substance in pilot plant scale operations; or
(3) Activities conducted outside of the laboratory.

(h) Propane when used as a fuel or held for sale as a fuel at a retail facility.
3. As used in this section:
(a) "Article" has the meaning ascribed to it in 29 C.F.R. § 1910.1200(c).
(b) "Crude oil" means a naturally occurring, unrefined petroleum liquid.
(c) "Petroleum refining process" means a process that:
(1) Is used in an establishment which is primarily engaged in petroleum refining as defined in N.A.I.C.S. Code 32411, which is adopted by reference pursuant to NAC 459.95528; and
(2) Is used to:
(I) Produce a transportation fuel such as gasoline, diesel fuel or jet fuel;
(II) Produce a heating fuel such as kerosene, fuel gas distillate or fuel oil;
(III) Produce a lubricant;
(IV) Separate petroleum; or
(V) Separate, crack, react or reform an intermediate petroleum stream.
(d) "Retail facility" means a facility at which more than one-half of the income is obtained from direct sales to end users or at which more than one-half of the fuel sold, by volume, is sold through a cylinder exchange program.

Table of Substances

NAC 459.9533 Tabulated values for threshold quantity, two release quantity and toxic endpoints. (NRS 459.3816, 459.3818)
1. *The following table sets forth the list of highly hazardous substances and the parameters associated with carrying out C.A.P.P.:*

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T) or Flam(F)	Toxic End-point (mg/L)
Acetaldehyde	Ethanal		75-07-0	2,500	1,000	1	F	
Acetylene	Ethyne		74-86-2	*10,000*	*1,000*	*3*	F	
Acrolein	2-Propenol		107-02-8	150	1	1 & 2	T	0.0011
Acrylonitrile	2-Propenenitrile		107-13-1	*20,000*	*100*	*1 & 2*	T	0.076
Acrylyl chloride	2-Propenoyl chloride		814-68-6	250	100	2	T	0.00090
Alkylaluminums				5,000	50*	3		
Allyl alcohol	2-Propen-1-ol		107-18-6	*15,000*	*100*	*1 & 2*	T	0.036
Allyl chloride	3-chloropropene		107-05-1	1,000	100	3	*T*	*0.1252*
Allylamine	2-Propen-1-amine		107-11-9	1,000	500	2	T	0.0032
Ammonia	Anhydrous Ammonia	Anhydrous	7664-41-7	5,000	100	1 & 2	T	0.14
Ammonia	Ammonia solution Ammonium hydroxide	20wt% *to 44 wt%*	7664-41-7	*20,000* *note 2*	*1,000*	*1*	T	0.14

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T) or Flam(F)	Toxic End-point (mg/L)
Ammonia	Ammonia solution Ammonium hydroxide	concentration greater than 44% ammonia by weight	7664-41-7	10,000 ***note 2***	***1,000***	***1***	***T***	***0.14***
Ammonium perchlorate			7790-98-9	7,500	75*	3		
Ammonium permanganate			7787-36-2	7,500	75*	3		
Arsenous trichloride			7784-34-1	***15,000***	***1***	***1 & 2***	T	0.010
Arsine	Arsenic Hydride		7784-42-1	100	10	3	T	0.0019
bis(Chloromethyl) Ether	Chloromethyl Ether		542-88-1	100	10	1 & 2	T	0.00025
Boron trichloride			10294-34-5	2,500	100	3	T	0.010
Boron trifluoride			7637-07-2	250	25	3	T	0.028
Boron trifluoride w/Methyl Ether		1:1 ratio	353-42-4	***15,000***	***1,000***	***2***	T	0.023
Bromine			7726-95-6	1,500	500	2	T	0.0065
Bromine chloride			13863-41-7	1,500	10	3	***T***	***0.00472***
Bromine pentafluoride			7789-30-2	2,500	100	3	***T***	***0.00715***
Bromine trifluoride			7787-71-5	15,000	1,000	3	***T***	***0.0025***
Bromotrifluorethylene			598-73-2	***10,000***	***1,000***	***3***	F	
1,3-Butadiene			106-99-0	***10,000***	***10***	***1***	F	
Butane			106-97-8	***10,000***	***1,000***	***3***	F	
1-Butene			106-98-9	***10,000***	***1,000***	***3***	F	
2-Butene			107-01-7	***10,000***	***1,000***	***3***	F	
Butene			25167-67-3	***10,000***	***1,000***	***3***	F	
2-Butene-cis			590-18-1	***10,000***	***1,000***	***3***	F	
2-Butene-trans			624-64-6	***10,000***	***1,000***	***3***	F	
Butyl hydroperoxide (Tertiary)			75-91-2	5,000	50*	3		

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T) or Flam(F)	Toxic End-point (mg/L)
Butyl perbenzoate (Tertiary)			614-45-9	7,500	75*	3		
Carbon disulfide			75-15-0	***20,000***	***100***	***1 & 2***	T	0.16
Carbon oxysulfide	Carbon Oxide Sulfide		463-58-1	***10,000***	***100***	***1***	F	
Carbonyl fluoride			353-50-4	2,500	10	3	***T***	***0.00972***
Cellulose nitrate		concentration greater than 12.6% nitrogen	9004-70-0	2,500	25*	3		
Chlorine			7782-50-5	1,500	10	1 & 2	T	0.0087
Chlorine dioxide			10049-04-4	1,000	100	3	T	0.0028
Chlorine monoxide			7791-21-1	***10,000***	***1,000***	***3***	F	
Chlorine pentafluoride			13637-63-3	1,000	10	3	***T***	***0.003***
Chlorine trifluoride			7790-91-2	1,000	100	3	***T***	***0.0038***
Chlorodiethylaluminum	Diethylaluminum Chloride		96-10-6	5,000	50*	3		
1-Chloro-2,4-Dinitrobenzene			97-00-7	5,000	50*	3		
Chloroform			67-66-3	***20,000***	***10***	***1 & 2***	T	0.49
Chloromethyl methyl ether			107-30-2	500	10	1 & 2	T	0.0018
Chloropicrin			76-06-2	500	50	3	***T***	***0.00134***
Chloropicrin/ Methylbromide mix				1,500	500	3	***T***	***0.00078***
Chloropicrin/Methyl chloride mix				1,500	500	3	***T***	
1-Chloropropylene			590-21-6	***10,000***	***1,000***	***3***	F	
2-Chloropropylene			557-98-2	***10,000***	***1,000***	***3***	F	
Crotonaldehyde	2-Butenal		4170-30-3	***20,000***	***100***	***1 & 2***	T	0.029
Crotonaldehyde, (E)-	2-Butenal, (E)-		123-73-9	***20,000***	***100***	***1 & 2***	T	0.029

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T) or Flam(F)	Toxic End-point (mg/L)
Cumene Hydroperoxide			80-15-9	5,000	10	1		
Cyanogen	Ethanedinitrile		460-19-5	2,500	100	1	F	
Cyanogen chloride			506-77-4	500	10	1	T	0.030
Cyanuric fluoride			675-14-9	100	10	3	***T***	***0.00017***
Cyclohexylamine	Cyclohexanimine		108-91-8	***15,000***	***1,000***	***2***	T	0.16
Cyclopropane			75-19-4	***10,000***	***1,000***	***3***	F	
Diacetyl peroxide		concentration greater than 70%	110-22-5	5,000 ***note 2***	50*	3		
Diazomethane			334-88-3	500	10	3		
Dibenzoyl peroxide			94-36-0	7,500	75*	3		
Diborane			19287-45-7	100	10	3	T	0.0011
Dibutyl peroxide (tertiary)			110-05-4	5,000	50*	3		
Dichloro acetylene			7572-29-4	250	10	3		
Dichlorosilane			4109-96-0	2,500	100	3	F	
Diethylzinc			557-20-0	10,000	100*	3		
Difluoroethane			75-37-6	***10,000***	***1,000***	***3***	F	
Diisopropyl peroxydicarbonate			105-64-6	7,500	75*	3		
Dilauroyl peroxide			105-74-8	7,500	75*	3		
Dimethyl sulfide			75-18-3	100	10	3	***T***	***1.27***
Dimethylamine		***anhydrous***	124-40-3	2,500	1,000	1	F	
Dimethyldichlorosilane			75-78-5	1,000	500	2	T	0.026
1,1-Dimethylhydrazine			57-14-7	1,000	10	1 & 2	T	0.012
2,2-Dimethylpropane			463-82-1	***10,000***	***1,000***	***3***	F	
2,4-Dinitroanaline			97-02-9	5,000	50*	3		
Epichlorohydrin			106-89-8	***20,000***	***100***	***1 & 2***	T	0.076

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T) or Flam(F)	Toxic End-point (mg/L)
Ethane			74-84-0	*10,000*	*1,000*	*3*	F	
Ethyl acetylene	1-Butyne		107-00-6	*10,000*	*1,000*	*3*	F	
Ethyl chloride			75-00-3	*10,000*	*100*	*1*	F	
Ethyl ether			60-29-7	*10,000*	*100*	*1*	F	
Ethyl mercaptan	Ethanethiol		75-08-1	*10,000*	*1,000*	*3*	F	
Ethyl nitrite			109-95-5	5,000	50*	3	F	
Ethylamine	Ethanamine		75-04-7	7,500	100	1	F	
Ethylene	Ethene		74-85-1	*10,000*	*1,000*	*3*	F	
Ethylene fluorohydrin			371-62-0	100	10	2	*T*	*0.0008*
Ethylene oxide	Oxirane		75-21-8	5,000	10	1 & 2	T	0.090
Ethylenediamine			107-15-3	*20,000*	*5,000*	*1 & 2*	T	0.49
Ethyleneimine	Aziridine		151-56-4	1,000	1	1 & 2	T	0.018
Fluorine			7782-41-4	100	10	1 & 2	T	0.0039
Formaldehyde		concentration of 37% or greater by weight	50-00-0	1,000 *note 2*	100	1 & 2	T	0.012
Furan			110-00-9	500	100	1 & 2	T	0.0012
Hexafluoroacetone			684-16-2	5,000	10	3	*T*	*0.0068*
Hydrazine			302-01-2	*15,000*	*1*	*1 & 2*	T	0.011
Hydrochloric acid		37% or greater	7647-01-0	*15,000* *note 2*	1,000	3	T	0.030
Hydrofluoric acid		50% or greater	7664-39-3	*1,000* *note 2*	100	1	T	0.016
Hydrogen			1333-74-0	*10,000*	*1,000*	*3*	F	
Hydrogen bromide			10035-10-6	5,000	10	3	*T*	*0.01*
Hydrogen chloride		Anhydrous	7647-01-0	5,000	100	3	T	0.030
Hydrogen cyanide	Hydrocyanic acid	Anhydrous	74-90-8	1,000	10	1 & 2	T	0.011
Hydrogen fluoride		Anhydrous	7664-39-3	1,000	100	1 & 2	*T*	*0.016*

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T) or Flam(F)	Toxic End-point (mg/L)
Hydrogen peroxide		concentration of 52% or greater by weight	7722-84-1	7,500 *note 2*	1,000	2		
Hydrogen selenide			7783-07-5	150	10	2	T	0.00066
Hydrogen sulfide			7783-06-4	1,500	100	1 & 2	T	0.042
Hydroxylamine			7803-49-8	2,500	25*	3		
Iron, pentacarbonyl			13463-40-6	250	100	2	T	0.00044
Isobutane	1,1-dimethyl ethane		75-28-5	*10,000*	*1,000*	*3*	F	
Isobutyronitrile			78-82-0	*20,000*	*1,000*	*2*	T	0.14
Isopentane			78-78-4	*10,000*	*1,000*	*3*	F	
Isoprene			78-79-5	*10,000*	*100*	*1*	F	
Isopropyl chloride	2 - chloropropane		75-29-6	*10,000*	*1,000*	*3*	F	
Isopropyl chloroformate			108-23-6	*15,000*	*1,000*	*2*	T	0.10
Isopropyl formate			625-55-8	500	100	3	*T*	*0.0014*
Isopropylamine			75-31-0	5,000	1,000	3	F	
Ketene			463-51-4	100	10	3	*T*	*0.18*
Methacrylaldehyde			78-85-3	1,000	500	3	*T*	*0.007*
Methacryloyl chloride			920-46-7	150	100	2	*T*	*0.0006*
Methacryloyloxyethyl isocyanate			30674-80-7	100	10	3	*T*	*0.00063*
Methane			74-82-8	*10,000*	*1,000*	*3*	F	
Methyl acrylonitrile	Methacrylonitrile		126-98-7	250	25	3	T	0.0027
Methyl bromide			74-83-9	2,500	500	3	*T*	*0.194*
3-Methyl-1-butene	Isopentene		563-45-1	*10,000*	*1,000*	*3*	F	
2-Methyl-1-butene			563-46-2	*10,000*	*1,000*	*3*	F	
Methyl chloride			74-87-3	15,000	100	1	T	0.82
Methyl chloroformate			79-22-1	500	100	3	T	0.0019

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T) or Flam(F)	Toxic End-point (mg/L)
Methyl disulfide			624-92-0	100	10	3	***T***	***0.19***
Methyl ether			115-10-6	***10,000***	***1,000***	***3***	F	
Methyl ethyl ketone peroxide	Ethyl methyl ketone peroxide	concentration greater than 60%	1338-23-4	5,000 ***note 2***	10	1		
Methyl fluoroacetate			453-18-9	100	10	3	***T***	***0.00025***
Methyl fluorosulfate			421-20-5	100	10	3	***T***	***0.00023***
Methyl formate			107-31-3	***10,000***	***1,000***	***3***	F	
Methyl hydrazine			60-34-4	100	10	1 & 2	T	0.0094
Methyl iodide			74-88-4	7,500	100	1	***T***	***0.29***
Methyl isocyanate			624-83-9	250	10	1 & 2	T	0.0012
Methyl mercaptan			74-93-1	5,000	100	1 & 2	T	0.049
Methyl thiocyanate			556-64-9	***20,000***	***10,000***	***2***	T	0.085
Methyl vinyl ketone			78-94-4	100	10	2	***T***	***0.00007***
Methylamine	Methanamine	Anhydrous	74-89-5	1,000	100	1	F	
2-Methylpropene			115-11-7	***10,000***	***1,000***	***3***	F	
Methyltrichlorosilane			75-79-6	500	50	3	T	0.018
Nickel carbonyl			13463-39-3	150	10	1 & 2	T	0.00067
Nitric acid		80% or greater	7697-37-2	***15,000*** ***note 2***	***1,000***	***1 & 2***	T	0.026
Nitric acid		concentration of 94.5% or greater by weight	7697-37-2	500 ***note 2***	50	3	***T***	***0.026***
Nitric oxide	Nitrogen oxide		10102-43-9	250	10	1 & 2	T	0.031
Nitroaniline	para Nitroaniline		100-01-6	5,000	50*	3		
Nitrogen dioxide			10102-44-0	250	10	1 & 2	***T***	***0.0282***
Nitrogen oxides		NO; NO_2; N_2O_4; N_2O_3	10102-44-0	250	10	3	***T***	***0.0282***
Nitrogen tetroxide			10544-72-6	250	10	1	***T***	***0.0564***

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T) or Flam(F)	Toxic End-point (mg/L)
Nitrogen trifluoride			7783-54-2	5,000	1,000	3	***T***	***0.29***
Nitrogen trioxide			10544-73-7	250	10	3	***T***	***0.016***
Nitromethane			75-52-5	2,500	25*	3		
Oleum	Fuming sulfuric acid	65 wt% or greater of SO_3	8014-95-7	1,000	500	3	T	0.010
Osmium tetroxide			20816-12-0	100	10	3	***T***	***0.001***
Oxygen difluoride	Fluorine monoxide		7783-41-7	100	10	3		
Ozone			10028-15-6	100	10	3		
Pentaborane			19624-22-7	100	10	3	***T***	***0.00026***
1,3-Pentadinene			504-60-9	***10,000***	***100***	***1***	F	
Pentane			109-66-0	***10,000***	***1,000***	***3***	F	
1-Pentene			109-67-1	***10,000***	***1,000***	***3***	F	
2-Pentene, (E)-			646-04-8	***10,000***	***1,000***	***3***	F	
2-Pentene, (Z)-			627-20-3	***10,000***	***1,000***	***3***	F	
Peracetic acid	Peroxyacetic acid	concentration greater than 60% acetic acid	79-21-0	1,000 ***note 2***	500	2	T	0.0045
Perchloric acid		concentration greater than 60% by weight	7601-90-3	5,000 ***note 2***	50*	3		
Perchloromethyl mercaptan			594-42-3	150	100	1 & 2	T	0.0076
Perchloryl fluoride			7616-94-6	5,000	100	3	***T***	***0.042***
Phosgene	Carbonyl chloride		75-44-5	100	10	1 & 2	T	0.00081
Phosphine	Hydrogen phosphide		7803-51-2	100	10	3	T	0.0035
Phosphorus oxychloride	Phosphoryl chloride		10025-87-3	1,000	500	3	T	0.0030
Phosphorus trichloride			7719-12-2	1,000	500	3	T	0.028
Piperidine			110-89-4	***15,000***	***1,000***	***2***	T	0.022

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T) or Flam(F)	Toxic End-point (mg/L)
Propadiene	1,2 Propadiene		463-49-0	***10,000***	***1,000***	***3***	F	
Propane			74-98-6	***10,000***	***1,000***	***3***	F	
Propargyl bromide	3-Bromopropyne		106-96-7	100	10	2	***T***	***0.00003***
Propionitrile			107-12-0	***10,000***	***10***	***1 & 2***	T	0.0037
Propyl chloroformate			109-61-5	***15,000***	***500***	***2***	T	0.010
Propyl nitrate			627-13-4	100	25*	3		
Propylene	1 Propene		115-07-1	***10,000***	***1,000***	***3***	F	
Propylene oxide			75-56-9	***10,000***	***100***	***1 & 2***	T	0.59
Propyleneimine			75-55-8	***10,000***	***1***	***1 & 2***	T	0.12
Propyne	1-Propyne		74-99-7	***10,000***	***1,000***	***3***	F	
Sarin			107-44-8	100	10	2	***T***	***0.00006***
Selenium hexafluoride			7783-79-1	1,000	1	1	***T***	***0.0016***
Silane			7803-62-5	***10,000***	***1,000***	***3***	F	
Stibine	Antimony hydride		7803-52-3	500	10	3	***T***	***0.0026***
Sulfur dioxide		Anhydrous	7446-09-5	1,000	100	3	T	0.0078
Sulfur pentafluoride			5714-22-7	250	10	3	***T***	***0.001***
Sulfur tetrafluoride			7783-60-0	250	10	3	T	0.0092
Sulfur trioxide	Sulfuric Anhydride		7446-11-9	1,000	100	2	T	0.010
Tellurium hexafluoride			7783-80-4	250	10	3	***T***	***0.0009***
Tetrafluoroethylene			116-14-3	5,000	1,000	3	F	
Tetrafluorohydrazine			10036-47-2	5,000	500	3	***T***	***0.0213***
Tetramethyl Lead			75-74-1	1,000	100	2	T	0.0040
Tetramethylsilane			75-76-3	***10,000***	***1,000***	***3***	F	
Tetranitromethane			509-14-8	***10,000***	***10***	***2***	T	0.0040
Thionyl chloride			7719-09-7	250	100	3	***T***	***0.0097***

Chemical Name	Alternate Chemical Name	Mixture Description	CAS Number	Threshold Quantity (lbs)	Two Release Quantity (lbs)	Two Release Source note 1	Tox(T) or Flam(F)	Toxic End-point (mg/L)
Titanium tetrachloride			7550-45-0	2,500	1,000	1 & 2	T	0.020
Toluene 2,4-diisocyanate			584-84-9	***10,000***	***100***	***1 & 2***	T	0.0070
Toluene 2,6-diisocyanate			91-08-7	***10,000***	***100***	***1 & 2***	T	0.0070
Toluene diisocyanate			26471-62-5	***10,000***	***100***	***1 & 2***	T	0.0070
Trichloro(chloromethyl) silane			1558-25-4	100	10	3	***T***	***0.0003***
Trichloro(dichlorophenyl) silane			27137-85-5	2,500	500	2	***T***	***0.008***
Trichlorosilane			10025-78-2	5,000	500	3	F	
Trifluorochloroethylene			79-38-9	10,000	500	3	F	
Trimethoxysilane			2487-90-3	1,500	500	3	***T***	***0.01***
Trimethylamine			75-50-3	***10,000***	***100***	***1***	F	
Trimethylchlorosilane			75-77-4	***10,000***	***500***	***2***	T	0.050
Vinyl acetate monomer			108-05-4	***15,000***	***1,500***	***3***	T	0.26
Vinyl acetylene			689-97-4	***10,000***	***1,000***	***3***	F	
Vinyl chloride			75-01-4	***10,000***	***1***	***1***	F	
Vinyl ethyl ether			109-92-2	***10,000***	***1,000***	***3***	F	
Vinyl fluoride			75-02-5	***10,000***	***1,000***	***3***	F	
Vinyl methyl ether			107-25-5	***10,000***	***1,000***	***3***	F	
Vinylidene chloride			75-35-4	***10,000***	***100***	***1***	F	
Vinylidene fluoride			75-38-7	***10,000***	***1,000***	***3***	F	

Table Notes:
Note 1: For Two Release Source Column: 1 = RQ as listed in 40 C.F.R. Part 302; 2 = RQ as listed in 40 C.F.R. Part 355; 3 = Two Release Quantity as determined in "Technical Basis Document for C.A.P.P. Two Release Quantities and Toxic Endpoints."
Note 2: The threshold quantity must be applied to the fraction of the chemical in the actual mixture.
* These substances must be involved in a fire or explosion to qualify as a release pursuant to ***subparagraph (2) of*** paragraph ***(a)*** of subsection 1 of NAC 459.95323.

2. Except as otherwise provided in subsection 3, a substance must be classified as an explosive if the substance is classified as division 1.1, 1.2, 1.3, 1.4 or 1.5 in column 3 of the Table of Hazardous Materials in 49 C.F.R. § 172.101, which is adopted by reference pursuant to NAC 459.95528.
3. The list of explosives as classified pursuant to subsection 2 excludes those substances described in 18 U.S.C. § 845(a).
4. If a substance:
(a) Is listed as a highly hazardous substance pursuant to subsection 1; and
(b) Is also classified as an explosive pursuant to subsection 2 which is not excluded pursuant to subsection 3, the substance must be treated as a highly hazardous substance for the purposes of NAC 459.952 to 459.95528, inclusive, and sections 2 to 9, inclusive, of this regulation if the substance is present in the process in excess of the threshold quantity set forth for the substance pursuant to subsection 1.

General Performance and Submission Requirements

NAC 459.95332 General requirements. (NRS 459.3818) The owner or operator of a facility that has a process which is subject to ***C.A.P.P.*** shall:
1. Register annually with the Division pursuant to NAC 459.95348 to 459.95358, inclusive;
2. Pay the annual fees pursuant to NAC 459.95334 if the facility contains one or more processes and does not have explosives manufacturing operations;
3. Pay the annual fees pursuant to NAC 459.953345 if the facility contains one or more explosives manufacturing operations;
4. Develop a management system pursuant to NAC 459.95516***;***
5. Conduct a hazard assessment pursuant to NAC 459.95364 to 459.95376, inclusive;
6. Develop and implement a prevention program pursuant to NAC 459.95412 to 459.95435, inclusive;
7. Develop and implement an emergency response program pursuant to NAC 459.9544 and 459.95442; and
8. Provide information to the Division in advance of an inspection pursuant to subsection 2 of NAC 459.9552.

NAC 459.95334 Annual fee. (NRS 459.3818, 459.3824)
1. ***Except as otherwise provided in NAC 459.953345 and 459.953477, the*** owner or operator ***of a facility that contains one or more processes and does not have an explosive manufacturing operation*** shall pay the fee required by subsections 1 and 2 of NRS 459.3824 before July 31 of each year.
2. The amount of this annual fee for each facility will equal the sum of:
(a) A base fee that is established pursuant to subsection ***4;*** and
(b) A graduated fee that is established pursuant to subsection ***5.***
3. ***The total annual fee required by this section must not exceed $35,000 for a facility.***
4. The amount of the annual base fee that is authorized pursuant to subsection 1 of NRS 459.3824 is ***$5,600.***
5. The amount of the annual graduated fee that is authorized pursuant to subsection 2 of NRS 459.3824 is ***$39*** per unit of ***highly hazardous*** substance at a facility. A unit of ***highly hazardous*** substance is ***equal to the total amount of the highly hazardous substance present at a facility, divided by the corresponding threshold quantity set forth in subsection 1 of NAC 459.9533 for that highly hazardous substance.***

NAC 459.953345 Annual fees for facility with explosives manufacturing operation. (NRS 459.3818, 459.3824)
1. Except as otherwise provided in NAC 459.953477, an owner or operator of a facility that has an explosives manufacturing operation shall pay to the Division an annual fee before July 31, as prescribed in this section.
2. If the explosives manufacturing operation includes only the combining of ammonium nitrate and fuel oil mixture, the owner or operator of the facility of which the operation is a part shall pay to the Division an annual fee of $5,600.
3. If the explosives manufacturing operation includes any other type of explosives manufacturing, the owner or operator of the facility of which the operation is a part shall pay to the Division an annual fee of $13,500.
4. If a facility that has an explosives manufacturing operation also has a ***highly hazardous substance in a process in excess of the threshold quantity set forth for that highly hazardous substance in subsection 1 of NAC 459.9533,*** the owner or operator of the facility shall pay, in addition to the fees set forth in this section, the graduated fee set forth in subsection ***5*** of NAC 459.95334 and is exempt from the ***base*** fee set forth in subsection ***4*** of NAC 459.95334.
5. The total annual fee required by this section must not exceed $35,000 at any facility.

NAC 459.95344 Reports of regulatory agencies: Submission; form. (NRS 459.382) A governmental entity or agency of the State that is required by subsection 1 of NRS 459.382 to submit a report to the Division shall do so***, upon request,*** within 10 working days after a determination is made or an action is taken related to hazards involving highly hazardous substances ***or explosives*** at a facility. The report must be submitted on the following form:

NEVADA DIVISION OF ENVIRONMENTAL PROTECTION
CHEMICAL ACCIDENT PREVENTION PROGRAM
GOVERNMENTAL AGENCY REPORTING FORM

A facility which produces, uses, stores or handles a highly hazardous substance ***or manufactures an explosive for sale in a process subject to NAC 459.95323*** is subject to the provisions of NRS 459.380 to 459.3874, inclusive. Pursuant to NRS 459.382, governmental entities or agencies of the State are required to complete the following information whenever a determination is made or an action is taken related to hazards involving highly hazardous substances ***or explosives*** at a facility. Please complete this form and return it to the Nevada Division of Environmental Protection, 333 W. Nye Lane, ***Room 138,*** Carson City, Nevada ***89706-0851.***

1. Facility Name . . . . . .

2. Facility Location . . . . . .
. . . . . .
. . . . . .

3. Highly Hazardous Substances ***or Explosives*** Present at the Facility

Substance	Estimated Quantity (lbs.)
. . . . .	. . . . .
. . . . .	
. . . . .	

4. Describe any specific hazards related to highly hazardous substances ***or Explosives*** which were noticed by regulatory or inspection staff at the facility . . . . . .
. . . . . .
. . . . . .
. . . . . .
. . . . . .
. . . . . .

5. Describe any action your agency has taken at this facility related to highly hazardous substances ***or Explosives***. Include orders, notices, penalties, etc.
. . . . . .
. . . . . .
. . . . . .
. . . . . .
. . . . . .
. . . . . .
. . . . . .

6. List statutes, regulations, standards or codes related to or controlling actions taken by your agency
. . . . . .
. . . . . .

7. Agency contact: . . . . . Phone: . . . . . .

8. Authorized signature: . . . . . Date: . . . . . .

Attach additional sheets if required.

Permits to Construct and Operate New Process

NAC 459.95345 Application for permit to construct: Preliminary meeting with division. (NRS 459.3818*, 459.3829*)

1. Before an owner or operator of a facility may commence the construction of a new process subject to ***C.A.P.P.,*** the owner or operator must obtain a permit to construct the new process from the Division pursuant to NAC 459.95345 to ***459.953467,*** inclusive.

2. Before applying for a permit to construct a new process, the owner or operator of the process must meet with the Division to discuss:

(a) The scope of the project and the applicable codes and standards relating to the design and construction of the project;

(b) The requirements for the submission of documents; and

(c) The schedule for the construction of the project.

NAC 459.953451 Application for permit to construct: Submission; contents; requirements for accompanying documents, specifications and calculations. (NRS 459.3818*, 459.3829*)

1. To obtain a permit to construct a new process subject to ***C.A.P.P.,*** an owner or operator of a new process must submit to the Division a complete application for a permit to construct and two copies of the complete application. The Division shall determine which elements of the application, if any, will be reviewed at the site where the new process will be located.

2. An application for a permit to construct a new process must be made on a form prescribed by the Division and include:

(a) Registration for the process that includes:

(1) The information required by NAC ***459.9535;***

(2) ***A summary of the hazard assessment conducted pursuant to NAC 459.95364 to 459.95376, inclusive;***

(3) The name, address and telephone number of the person submitting the plans;

(4) An overview of the project that includes a description of:

(I) The process;

(II) The hours of operation during which the process will be operated;

(III) The estimated number of personnel, for each shift, who will be working on the process, including, without limitation, personnel in operations, personnel in maintenance, office staff, contract personnel and any other personnel;

(IV) The modes, frequency and hours of transportation of the incoming and outgoing raw materials and products;

(V) The scope of the construction; and

(VI) The schedule for the project; and

(5) Information concerning the inspectors of the construction required pursuant to NAC 459.953461;

(b) A coordinated emergency response plan document developed pursuant to NAC 459.9544 and 459.95442;

(c) Information concerning the process and safety process hazard analysis required pursuant to NAC 459.953455;

(d) Documents, specifications and calculations required pursuant to NAC 459.953457, 459.953459 and 459.95346; and

(e) A copy of the conditional use permit issued pursuant to NRS 278.147.

3. Documents, specifications and calculations submitted pursuant to NAC 459.953457, 459.953459 and 459.95346 must:

(a) Be stamped or sealed in accordance with chapter 625 of NRS, and any regulations adopted pursuant thereto, by the engineer who has responsible charge of the document, specification or calculation; and

(b) Include a table of contents or cover sheet that complies with the requirements of chapter 625 of NRS and any regulations adopted pursuant thereto.

NAC 459.953455 Contents of application for permit to construct: Process hazard analysis; information concerning process safety. (NRS 459.3818, *459.3829*)

1. In addition to any other information required to be included pursuant to NAC 459.95345 to 459.953477, inclusive, an application for a permit to construct must include:

(a) Information relating to the hazards of any ***highly hazardous*** substance ***or explosive*** as described in paragraph (a) of subsection 2 of NAC 459.95412.

(b) A description of the process chemistry, as required in NAC 459.95412, including, without limitation, a description of the potential side reactions, regardless of whether the reactions would create hazardous consequences.

(c) If not readily apparent from the piping and instrument diagrams, documentation concerning the control logic that explains the function of the process controllers, switches and interlocks. Such documentation must be as concise as possible to allow the Division to review and use the information efficiently.

(d) A material and energy balance as required in NAC 459.95412.

(e) A description of the safety system as required in NAC 459.95412.

(f) A complete process hazard analysis performed pursuant to NAC 459.95414.

(g) A list of vessels and rotating equipment, traceable to the piping and instrument diagram, and, if requested by the Division, design and code information.

2. The process hazard analysis and information concerning process safety included in an application for a permit to construct a new process must indicate the current revision number and date on which that revision was carried out.

NAC 459.953457 Contents of application for permit to construct: Site plan; plot plans of project area; diagrams; drawings. (NRS 459.3818, *459.3829*)

1. In addition to any other information required to be included pursuant to NAC 459.95345 to 459.953477, inclusive, an application for a permit to construct a new process must include:

(a) A site plan, drawn to scale, that identifies the location within the facility of the new process on a map. A site plan must include and indicate, without limitation:

(1) The city and county roads in the area of the facility of the new process.

(2) The area encompassing the endpoint of the worst-case release scenarios developed pursuant to NAC 459.95366 ***or the area encompassing an area extending 1 mile radially from the facility, whichever is larger.***

(3) A graphical delineation of the endpoints of each worst-case release scenario and alternative release scenario developed pursuant to NAC 459.95366 and 459.95368.

(4) All major roads and transportation corridors.

(5) Routes for incoming and outgoing raw materials and products.

(6) The location of the first responding fire station and the hazardous materials response station. ***If the first responding fire station or hazardous materials response station is located outside the plan area, the site plan must include the address of the station and indicate the distance and direction that the station is from the facility.***

(7) The location of schools, hospitals and other public receptors within the plan area.

(b) Plot plans of the project area, shown on separate drawings and drawn to scale, that show:

(1) The safety systems, including, without limitation, the locations of:

(I) Water and tankages for other materials associated with the fire suppression systems.

(II) The system pumps and the routing of the distribution piping.

(III) Hydrants, monitors and other similar fire suppression equipment.

(IV) The detectors of toxic and combustible gases and flames.

(V) Personal protective equipment.

(VI) Major process equipment.

(2) The location of the electrical hazardous areas. The plot plan must:

(I) Provide the necessary elevations and include detailed drawings to distinguish between electrically unclassified and electrically classified areas, as those terms are defined in Article 500 of the N.F.P.A. 70, the *National* ***Electrical*** *Code*, adopted by reference pursuant to NAC 459.95528; and

(II) Denote the nationally recognized code or standard upon which the drawing is based to determine the extent of the electrically classified areas.

(c) Process flow diagrams, shown on as many drawings as necessary, developed pursuant to NAC 459.95412. The process flow diagrams must correspond to the material and energy balance submitted pursuant to NAC 459.953455.

(d) Piping and instruments diagrams, shown on as many drawings as necessary, developed pursuant to NAC 459.95412. The piping and instrument diagrams must:

(1) Be submitted on paper that is 11 inches by 17 inches.

(2) Be on an easily legible scale.

(3) Cover the new process. The Division may request that the diagrams include any associated systems, including, without limitation, air, water, nitrogen and process drain systems, if the Division determines that the inclusion of the additional information is necessary to assist with the review of the process hazard analysis.

(4) Indicate all piping, equipment, instruments and controls.

(5) Correspond to:

(I) The process flow diagrams;

(II) The documentation concerning the control logic and the process hazard analysis submitted pursuant to NAC 459.953455; and

(III) The specifications submitted pursuant to NAC 459.953459.

(e) Drawings indicating the concrete foundations and structures related to the new process that are not subject to the review and approval of the local building official. These drawings must include and indicate:

(1) The preparation for the base and subbase, including, without limitation, compaction requirements;

(2) The requirements relating to forms, reinforcing bars and appurtenances;

(3) The specifications relating to concrete and grout;

(4) The requirements for testing and inspection; and

(5) The applicable codes, standards or industry recommended practices governing the design and construction to be used.

(f) Drawings for the structural steel support for the equipment and piping related to the new process that are not subject to the review and approval of the local building official. These drawings must include and indicate:

(1) Specifications for the steel and bolting;

(2) Requirements for welding, testing and inspection; and

(3) The applicable codes, standards or industry recommended practices governing the design and construction to be used.

2. A drawing included pursuant to this section in an application for a permit to construct must indicate the current revision number and date of the drawing and be of sufficient quality so that a legible copy can be made of the drawing. If a drawing is drawn to scale, the scale must be indicated and a bar scale must be included.

NAC 459.953459 Contents of application for permit to construct: Specifications. (NRS 459.3818*, 459.3829*)

Specifications included in an application for a permit to construct a new process:

1. Must indicate the current revision number and date on which the specifications were developed;

2. Must define:

(a) The applicable codes, standards or industry recommended practices to be followed for the design, construction and inspection of the new process;

(b) The design conditions, including, without limitation, maximum allowable working pressures, the design temperatures and the seismic criteria, where applicable;

(c) The required materials of construction;

(d) The qualification requirements for*:*

(1) The installation methods to be used ***;*** and

(2) The personnel performing the construction and inspection activities; and

(e) The requirements for inspection and testing; and

3. Must be provided for process piping, fittings and valves. ***Requirements for inspection, examination and testing related to piping construction must be appropriate for the application, and must, without limitation:***

(a) Meet the requirements defined in Chapter VI of ASME B31.3 - 1999 Process Piping with Addenda, which is adopted by reference pursuant to NAC 459.95528;

(b) Require examination of:

(1) Not less than 5 percent of all circumferential butt and miter groove welds by random radiography and require that the welds meet the acceptable criteria for normal fluid service specified in Chapter VI of ASME B31.3; and

(2) Not less than 5 percent of socket welds and other fillet welds by magnetic particle, liquid penetrant or ultrasonic testing and require that the welds meet the acceptance criteria for normal fluid service specified in Chapter VI of ASME B31.3.

NAC 459.95346 Contents of application for permit to construct: Calculations. (NRS 459.3818*, 459.3829*)
1. In addition to any other information required to be included, an application for a permit to construct a new process must include calculations for:
(a) Concrete foundations for drawings submitted pursuant to NAC 459.953457, including, without limitation, a soils report to support the design calculations;
(b) Structural steel drawings submitted pursuant to NAC 459.953457; and
(c) ***The capacity of*** pressure relief devices ***and pressure relief systems*** to be included in the new process.
2. Calculations included in an application for a permit to construct a new process must indicate the current revision number and the date of the current calculation.
3. Each set of calculations must include a cite to the applicable code, standard or industry recommended practice governing the design and construction that was used in making the calculation.
4. If the calculations are computer-generated, the calculations must include:
(a) A complete description of the mathematical model used in the design; and
(b) An identification of the design program used, input data required, limitations on the application of the program and the final results.
5. Upon the request of the Division, an applicant for a permit to construct shall provide supporting information for the calculations provided in the application, including, without limitation, data generated by vendors.

NAC 459.953461 Contents of application for permit to construct: Information concerning inspectors for construction of process pipes, concrete foundations and structural steel. (NRS 459.3818*, 459.3829*)
1. An applicant for a permit to construct must include in the application information concerning the inspectors for the construction of process pipes, concrete foundations and structural steel if these activities are to be permitted pursuant to NAC 459.953467.
2. The information concerning the inspectors must identify:
(a) Each inspector to be employed by the applicant;
(b) The scope of the inspection services to be provided by each inspector, including, without limitation, the types of observations and tests to be used; and
(c) The qualifications of each inspector that will enable the inspector to perform the inspection. If the inspector is required to be certified or hold other specific credentials to perform his duties, the applicant must include a copy of the required certifications or credentials.

NAC 459.953463 Initial review of application for permit to construct; notification of applicant concerning completeness of application. (NRS 459.3818*, 459.3829*)
1. Upon receipt of an application for a permit to construct a new process, the division shall review the application to determine if the application includes all the information required by NAC 459.953451. Not later than 30 days after the date on which an application is received, the division shall provide to the applicant its initial determination as to the completeness of the application.
2. If the division determines that an application for a permit to construct does not include all the information required by NAC 459.953451, the division shall notify the applicant of its determination and include in the notice a description or list of the deficiencies.
3. If the division determines that an application for a permit to construct is not complete, the division may:
(a) Return all the submitted information to the applicant and require the applicant to resubmit the application when completed; or
(b) Delay the review of the incomplete application until the applicant submits the required information and the application is determined to be complete.

NAC 459.953465 Notice of receipt of application for permit to construct; period for public comment; action by division after period of public comment. (NRS 459.3818, *459.3829*)

1. Upon determining that an application for a permit to construct a new process is complete, the Division shall issue a notice of its receipt of the application. The notice must:

(a) Be sent to the applicant and the local governing body in the area in which the new process is to be located, and be published in a newspaper of general circulation for the area in which the process is to be located; and

(b) Summarize the review to be conducted by the Division on the application for the permit to construct and state that the following information will be available for public review:

(1) The registration submitted pursuant to NAC 459.953451;

(2) The coordinated emergency plan document;

(3) The site plan; and

(4) A copy of the conditional use permit.

2. The period for public comment must be 30 days and commences on the date on which the notice is published in the newspaper.

3. Not later than 15 days after the date on which the period for public comment concerning an application for a permit to construct closes, the Division may, after considering the documents that are part of the application, require further modifications if such modifications are determined necessary to satisfy the requirements ***set forth in NAC 459.953467 for issuing a permit to construct.***

NAC 459.953467 Conditions for issuance of permit to construct; approval of site plan; certain modifications in construction to be reflected in pre-startup safety review. (NRS 459.3818, *459.3829*)

1. The Division shall issue a permit to construct a new process if the Division:

(a) Approves the analysis of off-site consequences developed pursuant to NAC ***459.95364 to 459.95376,*** inclusive;

(b) Determines that the inspectors for the construction to be used by the applicant for the permit to construct:

(1) A***re capable of providing an*** inspection as required by the applicable specifications, codes and standards, and ***of ensuring*** that the construction and installation of the new process is performed pursuant to those specifications, codes and standards;

(2) Are qualified by experience and, if applicable, hold the proper certifications and credentials to perform their duties as inspectors; ***and***

(3) Are not employed by or under contract with any entity that will be performing the construction activity subject to the permit to construct unless that entity is the owner or operator;

(c) Determines that:

(1) The emergency response program developed pursuant to NAC 459.9544 and 459.95442 is complete;

(2) Full-time emergency response capability is available; and

(3) Hazardous materials response capability:

(I) Is available pursuant to the requirements of 29 C.F.R. § 1910.120;

(II) Is available 24 hours a day; and

(III) Will be provided by an organization that is not a volunteer fire department;

(d) Determines that the process hazard analysis complies with NAC 459.95414;

(e) Approves the site plan developed pursuant to NAC 459.953457;

(f) Determines that:

(1) The plans identifying the locations of the electrical hazardous area developed pursuant to NAC 459.953457 are in compliance with the applicable codes and standards, except that the Division may accept a local building official's approval of the drawing if the criteria set forth in NAC 459.953457 are met;

(2) The piping and instrument diagrams are consistent with the process flow diagrams and specifications;

(3) The drawings of the concrete foundation are consistent with the applicable calculations submitted;

(4) The drawings relating to the structural steel to be used in the construction are consistent with the applicable calculations submitted;

(5) The specifications submitted comply with the applicable codes and standards, and the selected materials and design parameters are determined to be compatible with the process; and

(6) The calculations submitted ***provide answers that represent generally accepted calculation methods and*** comply with the ***appropriate*** codes, standards and industry recommended practices***, where applicable;***

(g) Finds, upon its review of the portions of the new process, that those portions are in conformance with any requirement set forth in the conditional use permit issued pursuant to NRS 278.147 that require compliance with any part of NRS 459.380 to 459.3874, inclusive, or any regulation adopted pursuant thereto;

(h) Completes the public review and comment process and any modifications required by NAC 459.953465 have been put into place***; and***

(i) Determines that the applicant is not delinquent on the payment of fees assessed pursuant to NAC 459.953475.

2. For the Division to approve a site plan:

(a) The worst-case release scenarios developed pursuant to NAC 459.95366 must be mitigated in a manner acceptable to the Division to minimize the impact on public receptors located outside the industrial zoning district in which the new process will be located. At a minimum, some level of passive or active mitigation must be employed.

(b) The alternate release scenarios developed pursuant to NAC 459.95368 must be mitigated in a manner acceptable to the Division to minimize the impact on public receptors located outside the industrial zoning district in which the new process will be located. At a minimum, some level of mitigation must be employed, including, without limitation, the use of toxic or combustible gas sensors, as appropriate, that must be physically located to enable the detection of a release and a response thereto in a timely manner to minimize the impact of the release.

(c) The locations of the emergency responders as shown on the site plan must be consistent with the locations of the emergency responders identified in the emergency response program.

3. Any modification in the construction of a new process allowed pursuant to subsection 1 that causes the alteration of any document, drawing or specification must be reflected in the prestart-up safety review conducted pursuant to NAC 459.95425.

NAC 459.953469 Commencement of construction before issuance of permit to construct. (NRS 459.3818*, 459.3829*)

1. If the division determines that a new process is being constructed in the interest of mitigating the effects of acutely hazardous conditions on public safety, the environment or the health of personnel, and timely implementation of the new process is critical to ensure the preservation of those objectives, the division may allow the owner or operator to commence construction on the new process before the permit to construct is issued.

2. The owner or operator of a new process may commence construction before a permit to construct is issued if:

(a) The owner or operator submits with its application for a permit to construct a letter detailing the reasons for the request to begin construction before the issuance of the permit to construct; and

(b) The division determines the application to be complete and has not identified any significant unmitigated hazard.

3. The division may:

(a) Impose such conditions as it determines necessary in authorizing an owner or operator to commence construction before a permit to construct is issued; and

(b) Revoke the authorization if it determines that the owner or operator has not complied with the conditions imposed.

(Added to NAC by Environmental Comm'n by R041-01, eff. 10-25-2001)

NAC 459.95347 Maintenance and availability of information during construction activity before issuance of permit to construct; revised schedule for construction upon issuance of permit. (NRS 459.3818*, 459.3829*)

1. During any construction activity done on a new process ***approved*** in accordance with NAC ***459.953467,*** the owner or operator of the new process shall:

(a) Maintain on-site:

(1) All documents, drawings and specifications related to the construction and operation of the new process;

(2) All records relating to inspections and testing related to the construction; and

(3) All records relating to the construction procedure and qualifications of persons performing the construction; and

(b) Make available such information to the Division or an authorized representative of the Division upon request by the Division or its representative.

2. Upon the issuance of a permit to construct, the owner or operator to whom the permit is issued shall provide the Division with a revised schedule for the construction that includes the approximate timing as to when:

(a) Concrete foundations will be poured;

(b) The erection of the structural steel components will be commenced;

(c) The fabrication of the process piping will be commenced;

(d) The hydrotesting for the process piping will be commenced; and

(e) Any other activities identified by the Division or an authorized representative of the Division will be performed or commenced.

NAC 459.953471 Permit to operate: Requirement to commence operation or to bring certain substances onto site of new process. (NRS 459.3818*, 459.3829*) Before an owner or operator of a facility:
Before an owner or operator of a facility:
1. Commences the operation of a new process*;* or
2. Brings any ***highly hazardous*** substances ***or explosives*** onto the site of the new process, the owner or operator must obtain a permit to operate from the Division pursuant to NAC 459.953473.

NAC 459.953473 Permit to operate: Conditions for issuance; submission of assessment report. (NRS 459.3818*, 459.3829*)
1. The Division shall issue a permit to operate to the owner or operator of a new process only if:
(a) The Division has issued a permit to construct the new process;
(b) The owner or operator has received all appropriate permits from the local building official for the drawings and calculations for the construction of concrete foundations and structural steel;
(c) The Division determines that the requirements set forth in NAC ***459.953475,*** 459.95412 to 459.95442, inclusive, ***and 459.95516*** have been satisfied; and
(d) The owner or operator ***is not delinquent on the payment of fees assessed pursuant to NAC 459.953475.***
2. The ***owner or operator of a new process shall notify the Division when the owner or operator determines that the new process satisfies the requirements of any provision set forth in NAC 459.95412 to 459.95442, inclusive, or 459.95516 and is ready for review by the Division.***

NAC 459.953475 Fees. (NRS 459.3818, 459.3824*, 459.3829*)
1. An owner or operator of a new process shall remit fees to the Division for activities conducted by the Division relating to ***permitting activities conducted pursuant to NAC 459.95345 to 459.953473, inclusive.***
2. Upon the determination by the Division that an application for a permit to construct a new process is complete, the owner or operator shall remit $5,000 to the Division. The Division shall issue invoices to the owner or operator for any costs in excess of $5,000, except that:
(a) If the new process has 5 or less piping and instrument diagrams, not including drawing legend sheets and utility piping and instrument diagrams, invoices may not be issued for more than a cumulative amount of $40,000;
(b) If the new process has at least 6 but not more than 20 piping and instrument diagrams, not including drawing legend sheets and utility piping and instrument diagrams, invoices may not be issued for more than a cumulative amount of $50,000; or
(c) If the new process has more than 20 piping and instrument diagrams, not including drawing legend sheets and utility piping and instrument diagrams, invoices may not be issued for more than a cumulative amount of $50,000, plus $500 for each piping and instrument diagram in excess of 20 diagrams.
3. The Division shall accrue charges for activities relating to the permitting of the new process conducted by:
(a) Personnel of the Division in the amount of ***$68*** per hour; and
(b) Contractors in an amount equal to the cost to the Division, plus 5 percent.
4. The Division shall not require the owner or operator to pay more than the maximum cumulative amount for the respective new process as set forth in subsection 2, except that fees related to:
(a) The review of the concrete foundations or structural steel design; and
(b) Reviewing corrections, must not be considered when determining the maximum fee owed by the owner or operator.
5. After issuing a permit to ***operate*** to an owner or operator, the Division shall refund any excess fee paid to the Division by the owner or operator pursuant to this section.
6. The owner or operator may request in writing that the Division cease work on evaluating the application for a permit to construct, or evaluating whether the owner or operator has satisfied the requirements for the issuance of a permit to operate, at any time before the permit is issued. Upon receipt of such a request, the Division shall stop its evaluation and:
(a) Issue an invoice to the owner or operator for any outstanding money due pursuant to this section, including any money committed to any engineering contractor for review services; or
(b) Refund any excess fee paid to the Division by the owner or operator pursuant to this section, as appropriate.

NAC 459.953477 Exemption from payment of certain annual fees. (NRS 459.3818, 459.3824, *459.3829*)
1. Notwithstanding any provision of NAC 459.95334 or 459.953345 to the contrary, an owner or operator of a new process is exempt from the payment of annual fees related to the new process for the fiscal year in which the process or operation commences operation and for the following fiscal year.
2. The provisions of subsection 1 do not affect any other fees already being paid by an owner or operator of a facility for other processes or explosives manufacturing operations. In such a case, the provisions of subsection 1 apply only to the incremental annual fee as applied to the new process.
3. As used in this section, "fiscal year" means the fiscal year on which the state budget is based.

Annual Registration Form

NAC 459.95348 Submission; content; time requirements. (NRS 459.3818)
1. The owner or operator shall:
(a) Complete annually a single registration form covering all processes subject to ***C.A.P.P.;***
(b) Submit the ***annual*** registration ***pursuant to subsection 6*** to the Division on or before June 21 of each year***; and***
(c) Certify the annual registration pursuant to NAC 459.95358.
2. The registration must ***reflect*** the maximum quantity of all ***highly hazardous*** substances ***and explosives*** on-site between June 1 of the previous year and May 31 of the current year.
3. ***Except as otherwise provided in this subsection, before*** starting a new process, the owner or operator shall submit a registration ***form covering all the processes subject to C.A.P.P., including*** the new process **,** at least 90 days before introducing ***the highly hazardous*** substance ***or explosive*** into the facility. ***An owner or operator does not need to submit a registration form pursuant to this subsection to include a new process in his registration if the owner or operator has submitted an application for a permit to construct for the new process pursuant to NAC 459.953451.***
4. If a facility is ***or becomes*** subject to the provisions of ***subparagraph (2) of*** paragraph ***(a)*** of subsection 1 of NAC 459.95323, the owner or operator shall submit the registration pursuant to ***subsection 6*** not later than 90 days after the provisions of ***subparagraph (2) of*** paragraph ***(a)*** of subsection 1 of NAC 459.95323 take effect.
5. If the State Environmental Commission ***amends a threshold quantity or mixture concentration of a substance or*** adds a new substance to the table of ***highly hazardous*** substances set forth in ***subsection 1 of*** NAC 459.9533 and a facility has a process that uses the new substance ***or that uses the substance in an amount that exceeds the amended threshold quantity or mixture of concentration,*** the owner or operator shall, not later than 90 days after the effective date of the regulation which contains the addition ***or amendment,*** submit to the Division registration for the process ***in accordance with subsection 6.***
6. A complete registration consists of:
(a) Information about the facility as set forth in NAC 459.9535;
(b) A summary of the ***accident history in accordance with NAC 459.95354;***
(c) The status of any recommendation of the process hazard analysis developed pursuant to subsection 8 of NAC 459.95414 that was unresolved when the registration for the previous year was submitted;
(d) Such other information that may be required by the Division; and
(e) Certification as set forth in NAC 459.95358.

NAC 459.9535 Information concerning facility. (NRS 459.3818) Information about the facility on the annual registration form must include:
1. The name, street, city, county, state, zip code, latitude and longitude of the facility, the method for obtaining the latitude and longitude, and a description of the location that the latitude and longitude represent.
2. The Dun & Bradstreet number for the facility.
3. The name and Dun & Bradstreet number of any parent corporation.
4. The name, telephone number and mailing address of the owner or operator.
5. The name and title of the person with overall responsibility for the implementation of C.A.P.P.
6. The name, title, telephone number during normal business hours and telephone number that is available 24 hours per day of an emergency contact.

7. For each process:
(a) The name and C.A.S. number of each substance.
(b) The maximum quantity of each substance on-site between June 1 of the previous year and May 31 of the current year. For a new process, the owner or operator shall include in its annual registration form information about the maximum inventory they expect to have on-site through the following May 31.
(c) The N.A.I.C.S. code that is applicable to the process.
8. The identifier assigned by the United States Environmental Protection Agency, if any, to the facility.
9. The number of full-time employees at the facility.
10. Whether the facility is subject to 29 C.F.R. § 1910.119.
11. Whether the facility is subject to 40 C.F.R. Part 355.
12. Whether the facility has an operating permit pursuant to 40 C.F.R. Part 70 and, if applicable, the permit number.
13. The date of the last safety inspection of the facility by a federal, state or local governmental agency and the identity of the inspecting entity.

NAC 459.95354 Report of accident history. (NRS 459.3818) An ***annual registration must include an accident history of the facility for*** the period starting on June 1 of the previous year and ending on May 31 of the current year***. The accident history of the facility must include*** a description of:
1. Any unanticipated or unusual event at the facility that resulted in the release, including, without limitation, any accidental releases, of any ***highly hazardous*** substance ***or explosive; and***
2. The efforts undertaken by the ***owner and operator of the*** facility to assess the reasons and develop a remedy for the release or accidental release of the substance.

NAC 459.95358 Certification. (NRS 459.3818)
1. ***Any document required to be submitted pursuant to NAC 459.952 to 459.95528, inclusive, and any new sections in italics, of this regulation that is required to be certified must contain language for certification that substantially conforms*** to one of the following forms:
(a) I certify under penalty of law that the information provided in this document is true, accurate and complete. I am aware that there are significant civil and criminal penalties for submitting false, inaccurate or incomplete information.
[Signature, title, date signed]
(b) I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attached documents and that, based on my inquiry of the natural persons immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant civil and criminal penalties for submitting false information.
[Signature, title, date signed]
2. The certification must be signed by the sole proprietor of the facility, the highest ranking corporate officer of the facility, a partner at the facility, the manager of the facility or a person designated by one of those persons to sign the certification.

Hazard Assessments

NAC 459.95364 Parameters for analysis of off-site consequences. (NRS 459.3818)
1. An owner or operator shall use the following endpoints when preparing an analysis of off-site consequences:
(a) For toxic ***highly hazardous*** substances, the toxic endpoints provided pursuant to NAC 459.9533;
(b) For ***flammable highly hazardous substances*** and explosives:
(1) In a scenario that studies the potential effects of an explosion, an overpressure of 1 psi (0.0703 kilograms per square centimeter);
(2) In a scenario that studies radiant heat and exposure time, a radiant heat of 5 kw/m2 (1586 BTU per hour per square foot) for 40 seconds; or
(3) In a scenario that studies the lower flammability limit, the lower flammability limit provided by the N.F.P.A. or other generally recognized sources; or

(c) If an endpoint is not provided pursuant to NAC 459.9533 or a substance is not designated ***or classified*** as toxic, flammable or explosive pursuant to NAC 459.9533, the owner or operator shall define an appropriate endpoint ***that results in the greatest impact to employees and public receptors.*** The owner or operator shall define a toxic endpoint in a manner that is comparable to the health impacts defined by ERPG-2 of the *Emergency Response Planning Guidelines Series*, which is adopted by reference pursuant to NAC 459.95528, and shall define a flammable or explosive endpoint as set forth in paragraph (b).

2. The owner or operator shall use a wind speed of 1.5 meters per second (4.9 feet per second) and an atmospheric stability class of F when preparing the worst-case release analysis, except that, if the owner or operator demonstrates that local meteorological data show a higher minimum wind speed or less stable atmosphere at all times during the previous 3 years, these minimums may be used. For an analysis of an alternative scenario, the owner or operator shall use the typical meteorological conditions.

3. Except as otherwise provided in this subsection, the owner or operator shall use the highest daily maximum temperature during the previous 3 years and the average humidity for the site based on temperature and humidity data gathered on-site or at a local meteorological station for a worst-case release analysis involving a toxic ***highly hazardous*** substance. A facility using the *R.M.P. **Guidance for** Off-Site Consequence Analysis **,*** which is adopted by reference pursuant to NAC 459.95528, may use 25°C (77°F) and 50 percent humidity as values for these variables. For an analysis of an alternative scenario, the owner or operator may use typical temperature and humidity data gathered on-site or at a local meteorological station.

4. The owner or operator shall analyze:

(a) A worst-case release of a toxic ***highly hazardous*** substance assuming a ground level (0 feet) release.

(b) An alternative scenario involving a toxic ***highly hazardous*** substance using the release height that is determined by the release scenario.

5. The owner or operator shall use urban or rural topography for a worst-case release scenario or an alternative scenario, as appropriate. An urban topography has many obstacles, such as buildings and trees, in the immediate area. A rural topography has no buildings in the immediate area, and the terrain is generally flat and unobstructed.

6. The owner or operator shall ensure that any table or model used for a dispersion analysis of a toxic ***highly hazardous*** substance appropriately accounts for gas density.

7. For a worst-case release analysis, the owner or operator shall assume that a liquid other than a gas which is liquefied by refrigeration only is released at the highest daily maximum temperature based on data for the previous 3 years appropriate for the facility, or at process temperature, whichever is higher. For an alternative scenario, the owner or operator may assume that the substance is released at a process or ambient temperature which is appropriate for the scenario.

8. As used in this section, “typical meteorological conditions” means the temperature, wind speed, cloud cover and atmospheric stability class that prevail at the site based on data gathered at or near the site or from a local meteorological station.

NAC 459.95366 Analysis of worst-case release scenario. (NRS 459.3818)

1. The ***owner or operator of a*** facility may use the guidelines set forth in the *R.M.P. **Guidance for** Off-Site Consequence Analysis **,*** which is adopted by reference pursuant to NAC 459.95528, to calculate any of the values required in this section.

2. For each process **,** the owner or operator shall prepare:

(a) One worst-case release scenario that is estimated to create the greatest distance in any direction to an endpoint resulting from an accidental release of a toxic ***highly hazardous*** substance under worst-case conditions as described in NAC 459.95364;

(b) One worst-case release scenario that is estimated to create the greatest distance in any direction to an endpoint resulting from an accidental ignition or detonation of a flammable or explosive substance under worst-case release conditions as described in NAC 459.95364; and

(c) Additional worst-case release scenarios for a facility if:

(1) A worst-case release from another process at the facility potentially affects different public receptors than those affected by the worst-case release scenario prepared pursuant to paragraphs (a) and (b); or

(2) A toxic or flammable ***highly hazardous*** substance is present in excess of the threshold quantity and was not considered as part of the worst-case release scenarios prepared pursuant to paragraphs (a) and (b).

3. When preparing a worst-case release scenario:

(a) For a ***highly hazardous*** substance, the owner or operator shall assume that the release quantity is the greater of:

(1) For substances in a vessel, the greatest amount held in a single vessel, taking into account administrative controls that limit the maximum quantity.

(2) For substances in pipes, the greatest amount in a pipe, taking into account administrative controls that limit the maximum quantity.

(b) For an explosive, the owner or operator shall select the inventory that produces the greatest distance to an endpoint.

4. The owner or operator shall model each substance as a toxic ***substance, a*** flammable ***substance*** or ***an*** explosive as described in NAC 459.9533. If a substance is not described as ***a*** toxic ***substance, a*** flammable ***substance*** or ***an*** explosive ***pursuant to*** NAC 459.9533, the owner or operator shall select the scenario providing the most significant impact on employees and the public.

5. For toxic substances that are normally gases at ambient temperature and handled as a gas or as a liquid under pressure, the owner or operator shall:

(a) Assume that the quantity in the vessel or pipe, as determined pursuant to subsection ***3,*** is released as a gas over a period of 10 minutes;

(b) Assume that the release rate, in pounds per minute, is the total quantity divided by 10, unless passive mitigation systems are in place; and

(c) Calculate the impact of passive mitigation measures on the release rate using the *R.M.P.* ***Guidance for*** *Off-Site Consequence Analysis* ***,*** which is adopted by reference pursuant to NAC 459.95528.

6. For gases handled as refrigerated liquids at ambient pressure, the owner or operator:

(a) Shall assume that the substance is released as a gas in 10 minutes, if the released substance is not contained by passive mitigation systems or if the contained pool would have a depth of 1 cm (0.39 inch) or less; and

(b) May assume that the quantity of the substance in the vessel or pipe, as determined pursuant to subsection ***3,*** is spilled instantaneously to form a liquid pool, if the released substance is contained by passive mitigation systems in a pool with a depth greater than 1 cm (0.39 inch). The owner or operator shall calculate the volatilization rate at the boiling point of the substance and at the conditions set forth in subsections ***7, 8 and 9.***

7. For toxic substances that are normally liquids at ambient temperature, the owner or operator shall assume that the quantity in the vessel or pipe, as determined pursuant to subsection ***3,*** is spilled instantaneously to form a liquid pool. The owner or operator shall determine the surface area of the pool by assuming that the liquid spreads to 1 cm (0.39 inch) deep, unless passive mitigation systems are in place that serve to contain the spill and limit the surface area. If passive mitigation is in place, the owner or operator shall use the surface area of the contained liquid to calculate the volatilization rate. If the release would occur onto a surface that is not paved or smooth, the owner or operator may take into account the actual surface characteristics.

8. When determining the volatilization rate for purposes of subsection ***7,*** the owner or operator shall account for:

(a) The highest daily maximum temperature occurring during the past 3 years;

(b) The temperature of the substance in the vessel; and

(c) If the liquid spilled is a mixture or solution, the concentration of the substance.

9. For purposes of subsection ***7,*** the owner or operator shall determine the rate of release to air from the volatilization rate of the liquid pool determined pursuant to subsection ***8.*** The owner or operator may use the methodology set forth in the *R.M.P.* ***Guidance for*** *Off-Site Consequence Analysis* ***,*** which is adopted by reference pursuant to NAC 459.95528, or another publicly available technique that accounts for the modeling conditions and is recognized in the industry as a current practice. The owner or operator may use a proprietary model that accounts for the modeling conditions if the owner or operator allows the Division access to the model and describes to local emergency planners, upon request, the features of the
model and any differences from publicly available models.

10. The owner or operator shall assume that the quantity of the flammable substance determined pursuant to subsection ***3*** vaporizes resulting in a vapor cloud explosion. The owner or operator shall use a yield factor of 10 percent of the available energy released in the explosion to determine the distance to the explosion endpoint if the model used is based on TNTequivalent methods.

11. For explosives, the owner or operator shall employ methods for calculating overpressure based upon generally accepted practices.

12. The owner or operator shall use the parameters defined in NAC 459.95364 to determine the distance to the endpoints. The owner or operator may use the methodology provided in the *R.M.P.* ***Guidance for*** *Off-Site Consequence Analysis* ***,*** which is adopted by reference pursuant to NAC 459.95528, or any commercially or publicly available technique for air dispersion modeling if the technique accounts for the modeling conditions and is recognized in the industry as a current practice. The owner or operator may use a proprietary model that accounts for the modeling conditions if the owner or operator allows the Division access to the model and describes to local emergency planners ***,*** upon request ***,*** the features of the model and any differences in the model from publicly available models.

13. The owner or operator may consider passive mitigation systems for the worst-case release scenario analysis if the mitigation system is capable of withstanding the event that triggered the release and still function as intended.
14. Notwithstanding the provisions of subsection ***3,*** the owner or operator shall select as the worst-case scenario for a flammable substance, the worst-case scenario for a toxic ***highly hazardous*** substance or the worst-case scenario for an explosive, a scenario based on proximity to the boundary of the facility and smaller quantities of the substance handled at a higher process temperature or pressure if such a scenario would result in a greater distance to an endpoint beyond the facility boundary than the scenario provided pursuant to subsection ***3.***

NAC 459.95368 Analysis of alternative release scenario. (NRS 459.3818)
1. The owner or operator shall identify and analyze at least one alternative release scenario for each toxic ***highly hazardous*** substance that is used in a process and at least one alternative release scenario to represent all flammable ***highly hazardous substances*** or ***explosives*** that are used in processes.
2. The facility may use the *R.M.P.* ***Guidance for*** *Off-Site Consequence Analysis* ***,*** which is adopted by reference pursuant to NAC 459.95528, to calculate any of the values required in this section.
3. For each scenario required pursuant to subsection 1, the owner or operator shall select a scenario that:
(a) Is more likely to occur than the worst-case release scenario developed pursuant to NAC 459.95366; and
(b) Will reach an endpoint off-site. If no alternate release scenario will reach an endpoint offsite, then the owner or operator shall select the alternate release scenario with the most significant on-site impact.
4. The owner or operator shall consider, without limitation and where applicable, scenarios in which:
(a) A transfer hose releases because of splits or sudden uncoupling of the hose;
(b) Process piping releases because of a failure at a flange, joint, weld, valve and valve seal, drain or bleed;
(c) A process vessel or pump releases because of a crack or a failure of a seal, drain, bleed or plug;
(d) A vessel overfills and spills, or overpressurizes and vents through a relief valve or rupture disc; and
(e) A shipping container is mishandled and thereby breaks or is punctured leading to a spill.
5. The owner or operator:
(a) Shall use the appropriate parameters set forth in NAC 459.95364 to determine the distance to the endpoints;
(b) May use:
(1) The methodology provided in the *R.M.P.* ***Guidance for*** *Off-Site Consequence Analysis,* which is adopted by reference pursuant to NAC 459.95528; or
(2) A commercially or publicly available technique for air dispersion modeling, if the technique accounts for the specified modeling conditions and is recognized in the industry as a current practice; and
(c) May use a proprietary model that accounts for the modeling conditions if the owner or operator allows the Division access to the model and describes to local emergency planners, upon request, the features of the model and any differences from publicly available models.
6. The owner or operator may consider active and passive mitigation systems for an alternative release scenario if the mitigation systems are capable of withstanding the event that triggered the release and still function as intended.
7. When selecting the alternative release scenarios, the owner or operator shall consider, without limitation:
(a) ***Any accidental release and any incident that was investigated pursuant to NAC 459.95429;*** and
(b) The analyses performed pursuant to NAC 459.95414.

NAC 459.9537 Defining off-site impacts on population. (NRS 459.3818)
1. The owner or operator shall estimate the population within a circle that has its center at the point of the release and a radius that is the equivalent of the distance to the endpoint determined pursuant to NAC 459.95364. ***In making the estimation of the population, the*** owner or operator shall ***take into account*** the presence of institutions, such as schools, hospitals, prisons, parks and recreational areas, and major commercial, office and industrial buildings within the circle.
2. The owner or operator may use the *R.M.P.* ***Guidance for*** *Off-Site Consequence Analysis* ***,*** which is adopted by reference pursuant to NAC 459.95528, to calculate the values required in this section.
3. The owner or operator may use the most recent census data or any other updated information to estimate the population potentially affected.
4. The owner or operator shall estimate the population to two significant digits.
5. The owner or operator shall maintain at his facility the current estimate of population made pursuant to this section.

NAC 459.95372 Defining off-site impacts on environment. (NRS 459.3818)
1. The owner or operator shall ***define*** the environmental receptors within a circle with its center at the point of the release and a radius that is the equivalent of the distance to the endpoint determined pursuant to NAC 459.95364.
2. The ***owner or operator*** may use the *R.M.P.* ***Guidance for*** *Off-Site Consequence Analysis* ***,*** which is adopted by reference pursuant to NAC 459.95528, to calculate the values required in this section.
3. The owner or operator may rely on information provided on local maps prepared by the United States Geological Survey or on any source containing United States Geological Survey data to identify environmental receptors.
4. The owner or operator shall maintain at his facility the current list of environmental receptors defined by the owner or operator pursuant to this section.

NAC 459.95374 Review and update of off-site consequence analyses; revision of assessment report. (NRS 459.3818)
1. The owner or operator shall review and update the off-site consequence analyses developed pursuant to NAC 459.95364 to 459.95372, inclusive, at least once every 5 years.
2. If there is a change at a facility in a process that involves a ***highly hazardous*** substance ***or explosive*** or the quantity of ***such*** a substance ***or explosive*** that is stored or handled at the facility, or if any other change at the facility might reasonably be expected to increase or decrease the distance to the endpoint by a factor of two or more, the owner or operator shall prepare a revised analysis not later than 6 months after the change***.***
3. The owner or operator shall maintain at his facility the revised analysis prepared pursuant to this section.

NAC 459.95376 Documentation to be maintained concerning worst-case release scenarios and alternative release scenarios. (NRS 459.3818) The owner or operator shall maintain at his facility:
1. For worst-case release scenarios:
(a) A description of the vessel or pipeline and substance that the owner or operator selected as worst-case; and
(b) A list of the assumptions and parameters that the owner or operator used, including, without limitation:
(1) A description of any administrative controls and passive mitigation that the owner or operator assumed to limit the quantity of the substance which would be released;
(2) The anticipated effect of the controls and mitigation on the release quantity and rate; and
(3) The reasons why the owner or operator selected these assumptions and parameters.
2. For alternative release scenarios:
(a) A description of the scenarios that the owner or operator identified; and
(b) A list of the assumptions and parameters that the owner or operator used, including, without limitation:
(1) A description of any administrative controls and active or passive mitigation that the owner or operator assumed to limit the quantity of the substance which would be released;
(2) The anticipated effect of the controls and mitigation on the release quantity and rate; and
(3) The reasons why the owner or operator selected these assumptions and parameters.
3. For worst-case scenarios and alternative release scenarios:
(a) Documentation of:
(1) The estimated quantity released, release rate and duration of release;
(2) The methodology that the owner or operator used to determine the distance to the endpoints; and
(3) The data that the owner or operator used to estimate the population and environmental receptors which potentially will be affected; and
(b) Verification that the active and passive mitigation systems are designed to remain functional under the conditions of the release scenarios.

Requirements for Prevention Program

NAC 459.95412 Information concerning process safety. (NRS 459.3818)

1. ***The*** owner or operator of a facility with a process that is subject to ***C.A.P.P.*** shall compile written information concerning process safety before conducting a process hazard analysis required pursuant to NAC 459.95414.

2. The information concerning process safety must include, without limitation, information pertaining to:

(a) The hazards of the ***highly hazardous substances or explosives,*** including, without limitation:

(1) Toxicity information;
(2) Permissible exposure limits;
(3) Physical data;
(4) Reactivity data;
(5) Corrosivity data;
(6) Thermal and chemical stability data; and
(7) The foreseeable hazardous effects of inadvertent mixing of different materials. Material safety data sheets that satisfy the requirements of 29 C.F.R. § 1910.1200(g) may be used to comply with this requirement to the extent they contain the information required by this paragraph.

(b) The technology of the process, including, without limitation:

(1) A block flow diagram or simplified process flow diagram;
(2) The process chemistry;
(3) The maximum intended inventory;
(4) The safe upper and lower limits for any applicable process variable, including, without limitation, temperature, pressure, flow and composition; and
(5) An evaluation of the consequences of deviations.

(c) The equipment in the process, including, without limitation:

(1) The materials of construction;
(2) Piping and instrument diagrams;
(3) Electrical classification;
(4) The design of the relief system and the basis for the design;
(5) The design of the ventilation system;
(6) Design codes and standards that were employed;
(7) The material and energy balances for processes that were built after May 26, 1992; and
(8) The safety systems, such as interlocks, detection or suppression systems.

3. The owner or operator shall evaluate processes and equipment for conformance to applicable codes, standards and good engineering practices and document that the processes and equipment comply with recognized and generally accepted good engineering practices.

4. For existing processes and equipment designed and constructed in accordance with codes, standards or practices that are no longer in general use, the owner or operator shall determine and document that the equipment is designed, maintained, inspected, tested and operating in a safe manner.

NAC 459.95414 Process hazard analysis. (NRS 459.3818)

1. ***The*** owner or operator shall perform an initial process hazard analysis on a process that is subject to ***C.A.P.P.*** ***before introducing highly hazardous substances or explosives to the process.***

2. An owner or operator may use a process hazard analysis that was previously completed to comply with NRS 459.380 to 459.3874, inclusive, or 29 C.F.R. § 1910.119(e) to satisfy the requirement to perform an initial process hazard analysis provided that the analysis reflects the current process.

3. The owner or operator shall obtain the approval of the Division concerning the methodology of the process hazard analysis before conducting the analysis.

4. The owner or operator shall select one or more of the following methodologies as required by the complexity of the process:
(a) A "what if" analysis;
(b) A checklist;
(c) A "what if" analysis combined with a checklist;
(d) A hazard and operability study;
(e) A failure mode and effects analysis;
(f) A fault tree analysis; or
(g) An appropriate equivalent methodology.
5. When preparing a process hazard analysis, an owner or operator shall consider:
(a) The hazards of the process;
(b) Any previous incident that had a likely potential for catastrophic consequences, including, without limitation, near misses or accidental releases ***;***
(c) The engineering and administrative controls that are applicable to the hazards and their interrelationships, including, without limitation, the appropriate application of detection methodologies such as process monitoring, control instrumentation with alarms or detection hardware;
(d) The consequences of a failure of engineering and administrative controls;
(e) The siting of the facility;
(f) The human factors; and
(g) A qualitative evaluation of a range of the possible safety and health effects of a failure of controls.
6. If not evaluated as part of the process hazard analysis pursuant to subsections 1 to ***5,*** inclusive, a separate, dedicated hazard analysis, utilizing a checklist or other appropriate method, must be conducted to evaluate:
(a) Human factors;
(b) Facility siting; and
(c) External forces.
7. The owner or operator shall conduct the process hazard analysis with a team ***with*** expertise in engineering and process operations***. The team must consist of two or more persons and include*** at least:
(a) One member who has experience and knowledge specific to the process being evaluated; and
(b) One member who is knowledgeable in the methodology for the specific process hazard analysis being used.
8. The owner or operator shall:
(a) Promptly evaluate the findings and recommendations of the ***team formed pursuant to subsection 7;***
(b) Determine and document a course of action based on the evaluation;
(c) Develop a written schedule of when the actions are to be completed;
(d) Complete the actions as soon as possible ***and document each such completion; and***
(e) Communicate the actions to operating, maintenance and other employees whose work assignments are in the process and who may be affected by the recommendations or actions***.***
9. At least once every 5 years after the completion of the initial process hazard analysis, a team that satisfies the requirements of subsection ***7*** shall update and revalidate the process hazard analysis to ensure that the process hazard analysis is consistent with the current process.
10. A process hazard analysis must be updated and revalidated ***using a team meeting the requirements of subsection 7 and*** pursuant to the procedures set forth in NAC 459.9549 to 459.955, inclusive.
11. An owner or operator shall retain a process hazard analysis and an update ***and*** revalidation for each process subject to this section, as well as any documented resolution of recommendations described in subsection ***8,*** for the life of the process.

NAC 459.95416 Operating procedures. (NRS 459.3818)
1. ***The*** owner or operator of a facility with a process that is subject to ***C.A.P.P.*** shall develop and implement written operating procedures for that process which:
(a) Are consistent with the process safety information developed pursuant to NAC 459.95412; and
(b) Provide clear instructions for safely conducting such a process.
2. The operating procedures must include:
(a) Steps for each operating phase, including, without limitation, steps for:
(1) The initial start-up;
(2) Normal operations;
(3) Temporary operations;
(4) An emergency shutdown, including, without limitation, a description of the conditions under which an emergency shutdown is required and the assignment of responsibility for a shutdown to a qualified operator;
(5) Emergency operations;
(6) A normal shutdown; and
(7) Start-up following a turnaround or an emergency shutdown.
(b) Operating limits, including, without limitation:
(1) The consequences of a deviation; and
(2) The steps required to correct or avoid a deviation.
(c) Safety and health considerations, including, without limitation:
(1) The properties of, and hazards presented by, the chemicals used in the process;
(2) The precautions that are necessary to prevent exposure, including, without limitation, engineering controls, administrative controls and personal protective equipment;
(3) Control measures to be taken if physical contact or airborne exposure occurs;
(4) Quality control for raw materials;
(5) Control of hazardous chemical inventory levels; and
(6) Any special or unique hazards.
(d) A description of the safety systems and their functions.
3. The owner or operator shall:
(a) Ensure that the operating procedures are readily accessible to employees who work in or maintain an applicable process;
(b) Review the operating procedures as often as necessary to ensure that they reflect current operating practice, including, without limitation, any change to a process that may result from a change in process chemicals, technology or equipment;
(c) Certify annually that the operating procedures are current and accurate; and
(d) Develop and implement safe work practices for employees and contractors to provide for the control of:
(1) Hazards during a lockout or tagout;
(2) Hazards during a confined space entry;
(3) Hazards while opening the equipment or piping associated with a process;
(4) Entrance into the facility by maintenance, contractor, laboratory or other support personnel; and
(5) Any other hazards that may be encountered.

NAC 459.95418 Training procedures. (NRS 459.3818) ***The*** owner or operator of a facility with a process that is subject to ***C.A.P.P.:***
1. Shall, except as otherwise provided in subsection 2, ensure that each employee who is operating a process or will operate a process is trained in an overview of the process and in the operating procedures created pursuant to NAC 459.95416. Such training must include, without limitation, training in:
(a) The layout of the plant;
(b) The location of equipment and instruments;
(c) The specific safety and health hazards;
(d) Emergency operations, including, without limitation, procedures for an emergency shutdown;
(e) Safe work practices that are applicable to the job tasks of the employee ***; and***
(f) The program for the management of changes developed and implemented pursuant to NAC 459.95423, including instruction on how to recognize activities that are not replacement in kind.
2. May, in lieu of providing the training required pursuant to subsection 1, certify in writing that an employee who was operating a process on May 26, 1992, possesses the required knowledge, skills and abilities to carry out the duties and responsibilities safely as specified in the operating procedures.

3. Shall provide an employee with refresher training at least once every 3 years, and more often if it is determined after consultation with the employees who operate the process to be necessary, to ensure that the employee understands and adheres to the current operating procedures of the process.
4. May provide employees with any combination of classroom and field training, including, without limitation, on-the-job training. Training must, at a minimum, follow a predefined syllabus or checklist to ensure that each employee receives training which is essential to his job performance. On-the-job training, if it is the only method employed, does not satisfy the requirements of this subsection unless it follows a predefined syllabus or checklist.
5. Shall ascertain that each employee who operates a process has received and understood the training required pursuant to this section.
6. Shall prepare records that include, without limitation:
(a) The identity of the employee;
(b) The date of training;
(c) The substance of the training provided on that date; and
(d) The means used to verify that the employee understood the training, including, without limitation, any test records from such verification.

NAC 459.95421 Procedures for maintenance of equipment. (NRS 459.3818)
1. ***The*** owner or operator of a facility with a process subject to ***C.A.P.P.*** shall:
(a) Establish and implement written procedures to ensure the ongoing integrity of the equipment listed in subsection 2;
(b) Provide each employee who is involved in maintaining the ongoing integrity of the equipment listed in subsection 2 with:
(1) An overview of the process that uses the equipment and the potential hazards of the process;
(2) Training in the procedures that are applicable to the job tasks of the employee to ensure that the employee can perform the job tasks in a safe manner; ***and***
(3) Training in the program for the management of changes developed and implemented pursuant to NAC 459.95423, including instruction on how to recognize activities that are not replacement in kind;
(c) Perform inspections and tests on process equipment listed in subsection 2;
(d) Ensure that the procedures for inspection and testing follow recognized and generally accepted good engineering practices;
(e) Ensure that the inspections and tests of the equipment are performed:
(1) In the frequency required by good engineering practices and consistent with any applicable recommendations from the manufacturer of the equipment; or
(2) More frequently if determined to be necessary by previous experience in operating the equipment;
(f) Document each inspection and test that has been performed on the equipment, including, without limitation, documentation of:
(1) The date of the inspection or test;
(2) The name of the person who performed the inspection or test;
(3) The serial number or other identifier of the equipment on which the inspection or test was performed;
(4) A description of the inspection or test performed; and
(5) The results of the inspection or test;
(g) Correct any deficiencies in the equipment that are outside the acceptable limits which are described by the process safety information developed pursuant to NAC 459.95412 before using the equipment again;
(h) In the construction of new processes and equipment, ensure that the equipment, as fabricated, is suitable for the process for which it will be used;
(i) Perform appropriate checks and inspections to ensure that equipment is installed properly and consistent with design specifications and instructions from the manufacturer; and
(j) Ensure that maintenance materials, spare parts and equipment are suitable for the process for which they will be used.
2. This section applies to:
(a) Pressure vessels and storage tanks;
(b) Piping systems, including, without limitation, piping components such as valves;
(c) Relief and vent systems and devices;
(d) Emergency shutdown systems;
(e) Controls, including, without limitation, monitoring devices and sensors, alarms and interlocks; and
(f) Rotating equipment.

NAC 459.95423 Procedures for management of change in process. (NRS 459.3818)
The owner or operator of a facility with a process that is subject to ***C.A.P.P. shall:***
1. Establish and implement written procedures to manage changes, other than a replacement in kind, to:
(a) Chemicals, technology, equipment and procedures that are used in a process; and
(b) ***Buildings, structures and equipment that affect a process;***
2. Evaluate the impact of changes to organizational structure or staffing levels on the implementation of the prevention program and the emergency response program;
3. Ensure that the procedures established pursuant to ***subsection 1*** require that the following considerations are addressed before one of the changes ***described in subsection 1 occur and that the procedures specify the criteria for review and approval of each of the following considerations:***
(a) The technical basis for the proposed change;
(b) The impact of change on safety and health;
(c) Whether any modifications to operating procedures will be necessary;
(d) The time necessary to make the proposed change; and
(e) The requirements for authorization for the elements of the proposed change;
4. Inform and train for the change any employee who is involved in the operation of the process that is affected by the change and any maintenance or contract employee whose job tasks will be affected by the change before the start-up of the process or of the affected part of the process; and
5. Update:
(a) The process safety information required pursuant to NAC 459.95412; and
(b) The operating procedures or practices required pursuant to NAC 459.95416.

NAC 459.95425 Pre-startup safety review. (NRS 459.3818)
1. ***The*** owner or operator of a facility with a process that is subject to ***C.A.P.P.*** shall perform a pre-start-up safety review for new facilities and for modified facilities when the modification is significant enough to require a change in the process safety information.
2. A pre-start-up safety review must confirm that before a ***highly hazardous*** substance ***or explosive*** is introduced into a process:
(a) Construction and equipment is in accordance with design specifications;
(b) Safety, operating, maintenance and emergency procedures are in place and are adequate;
(c) For new or modified facilities, a process hazard analysis has been performed and recommendations have been resolved or implemented before start-up;
(d) Modified facilities meet the requirements concerning the management of changes set forth in NAC 459.95423; and
(e) Training of each employee involved in operating ***and maintaining*** the process has been completed.

NAC 459.95427 Verification of compliance; documentation. (NRS 459.3818)
1. ***The*** owner or operator of a facility with a process that is subject to ***C.A.P.P.*** shall:
(a) Certify at least once every 3 years that an evaluation has been performed of whether adequate procedures and practices as required pursuant to NAC 459.95412 to ***459.95442,*** inclusive, have been developed and implemented;
(b) Create a report of the findings of the evaluation made pursuant to paragraph (a);
(c) Promptly determine and document an appropriate response to any deficiency that is discovered during the evaluation;
(d) Document that any deficiency discovered during the evaluation has been corrected; and
(e) Retain the two most recent reports.
2. The evaluation must be conducted by at least one person who is knowledgeable in the process.

NAC 459.95429 Investigation of incidents. (NRS 459.3818) ***The*** owner or operator of a facility with a process that is subject to ***C.A.P.P.*** shall:
1. Investigate any incident that resulted in, or could reasonably have resulted in, a catastrophic release ***and take corrective action to prevent recurrence of the incident;***
2. Initiate the investigation of the incident as promptly as possible, but not later than 48 hours after the incident;
3. Establish a team to investigate the incident***. The team must consist of two or more persons and include at least:***
(a) One person who is knowledgeable in the process involved, including, without limitation, a contract employee if his work was involved in the incident; and

(b) ***One*** person who possesses appropriate knowledge and experience to investigate and analyze the incident thoroughly;
4. Prepare an incident report at the conclusion of the investigation which must include, at a minimum:
(a) The date of the incident;
(b) The date the investigation of the incident began;
(c) A description of the incident;
(d) The factors that contributed to the incident; and
(e) Recommendations resulting from the investigation;
5. Establish a system to address and resolve the findings and recommendations of the incident report promptly;
6. Document any solutions and corrective actions taken;
7. Ensure that the incident report is reviewed with all affected personnel whose job tasks are relevant to the findings of the incident report, including, without limitation, contract employees where applicable; and
8. Retain the incident report for 5 years.

NAC 459.95431 Employee participation. (NRS 459.3818) ***The*** owner or operator of a facility with a process that is subject to ***C.A.P.P.*** shall:
1. Develop a written plan of action regarding the implementation of the employee participation required by this section;
2. Consult with employees and their representatives about:
(a) Conducting and developing process hazard analyses; and
(b) Developing and implementing the other requirements of NAC 459.95412 to ***459.95442,*** inclusive; and
3. Provide to employees and their representatives access to process hazard analyses and other information which is developed pursuant to NAC 459.95412 to ***459.95442,*** inclusive.

NAC 459.95433 Hot work permit. (NRS 459.3818) ***The*** owner or operator of a facility with a process that is subject to ***C.A.P.P.*** shall:
1. Issue a hot work permit for hot work conducted on or near a process;
2. Document in the permit:
(a) That the fire prevention and protection requirements in 29 C.F.R. § 1910.252(a) are implemented before beginning hot work;
(b) The dates which are authorized for hot work; and
(c) The object on which hot work is to be performed; and
3. Keep the permit on file until completion of the hot work.

NAC 459.95435 Duties of owner or operator concerning contractors; duties of contractors. (NRS 459.3818)
1. ***The*** owner or operator of a facility with a process that is subject to ***C.A.P.P.*** shall:
(a) When selecting a contractor, obtain and evaluate information regarding the safety performance and programs of the contractor;
(b) Inform the contractor of known potential fire, explosion or toxic release hazards related to the work of the contractor and to the process on which he working;
(c) Explain to the contractor the applicable provisions of NAC 459.9544 and 459.95442;
(d) Develop and implement safe work practices consistent with NAC 459.95416; and
(e) Periodically evaluate the performance of the contractor in satisfying the requirements of subsection 2.
2. The contractor shall:
(a) Ensure that each of his employees who will work on the process is trained in the work practices necessary to perform his job safely;
(b) Ensure that each of his employees who will work on the process is instructed in:
    (1) The known potential fire, explosion or toxic release hazards related to his job and the process on which he is working; and
    (2) The applicable provisions of the emergency action plan;
(c) Document that each of his employees who will work on the process has received and understood the training required pursuant to this subsection;
(d) Prepare a record that contains:
    (1) The identity of the employee;
    (2) The date of training; and

(3) The means used to verify that the employee understood the training;
(e) Ensure that each of his employees who works on the process follows the safety rules of the facility, including, without limitation, the safe work practices required pursuant to NAC 459.95416; and
(f) Advise the owner or operator of any unique hazards presented by or found during the work of an employee.
3. This section:
(a) Applies to contractors who perform maintenance or repair, turnaround, major renovation, or specialty work on or adjacent to a process.
(b) Does not apply to contractors who provide incidental services that do not influence process safety, including, without limitation, janitorial work, food and drink services, laundry, delivery or other supply services.

Emergency Response Programs

NAC 459.9544 Applicability; compliance. (NRS 459.3818)
1. Except as otherwise provided in subsection 2, the owner or operator of a facility with a process that is subject to ***C.A.P.P.*** shall comply with the requirements of NAC 459.95442.
2. The owner or operator of a facility in which the employees will not respond to an accidental release is not required to comply with the provisions of NAC 459.95442 if:
(a) For facilities subject to 29 C.F.R. ***Part*** 1910, the facility has implemented ***a written*** emergency action plan that contains the elements set forth in 29 C.F.R. § ***1910.38(c)-(f);***
(b) Appropriate mechanisms are in place to notify emergency responders when there is a need for a response; ***and***
(c) The facility has coordinated response actions with the local fire department. ***For response actions to be coordinated, the owner or operator shall:***
(1) Identify the first responding fire station and hazardous materials response station;
(2) Review the written emergency action plan and appropriate mechanisms for notification developed for the facility with the responders identified in subparagraph (1) or their representatives;
(3) Keep a written record of such review meetings, including comments by the responders or their representatives to the written emergency action plan and appropriate mechanisms for notification of the responders; and
(4) Update information on a basis agreeable to the owner or operator and the responders.

NAC 459.95442 Establishment and implementation; review and coordination; written program. (NRS 459.3818)
1. An owner or operator shall:
(a) Establish and implement an emergency response program to protect employees, public health and the environment, which program must include:
(1) For facilities subject to 29 C.F.R. ***Part 1910, a written*** emergency action plan that contains the elements set forth in 29 C.F.R. § ***1910.38(c)-(f);***
(2) For facilities subject to 29 C.F.R. ***Part*** 1910, a program that contains the elements outlined in 29 C.F.R. § 1910.120(q);
(3) Procedures for informing the public and local emergency response agencies about an accidental release;
(4) Documentation of proper first-aid and emergency medical treatment necessary to treat accidental human exposures;
(5) Procedures and measures for emergency response after an accidental release;
(6) Procedures for the use, inspection, testing and maintenance of emergency response equipment;
(7) Training for all employees in relevant procedures for emergency response; and
(8) Procedures to review and update, as appropriate, the emergency response program to reflect changes at the facility and ensure that employees are informed of changes.
(b) Review and coordinate the emergency response program developed pursuant to ***paragraph (a)*** with local emergency responders. ***For response actions to be coordinated, the owner or operator shall:***
(1) Identify the first responding fire station and hazardous materials response station;
(2) Review the emergency response program developed for the facility with the responders identified in subparagraph (1) or their representatives;
(3) Keep a written record of such review meetings, including comments by the responders or their representatives to the emergency response program for the facility; and
(4) Update information on a basis agreeable to the owner or operator and the responder.

2. A written program satisfies the requirements of this section if it:
(a) Complies with other federal contingency plan regulations and the requirements set forth in subsection 1; or
(b) Complies with the requirements set forth in subsection 1 and is consistent with the approach of the National Response Team's Integrated Contingency Plan Guidance set forth in 61 Fed. Reg. ***28,641-28,664*** and 31,103-31,104 (1996).

Two Release Provisions

NAC 459.95486 Requirements for exemption from C.A.P.P. (*NRS 459.3813*)
1. A process that is otherwise subject to C.A.P.P. pursuant to ***subparagraph (2) of*** paragraph ***(a)*** of subsection 1 of NAC 459.95323 is not subject to C.A.P.P. if:
(a) Two or more years have elapsed since the ***owner or operator has registered pursuant to NAC 459.95348 and completed the process hazard analysis;***
(b) The owner or operator has complied with all relevant requirements of C.A.P.P.***;***
(c) The recommendations developed pursuant to ***subsection 8 of NAC 459.95414 are implemented;*** and
(d) The State Environmental Commission has granted the exemption pursuant to NAC 459.95488.
2. The Division shall require continued compliance with C.A.P.P. until the ***recommendations from the process hazard analysis are*** completed and the State Environmental Commission has granted the exemption pursuant to NAC 459.95488.

NAC 459.95488 Request for exemption from C.A.P.P. (*NRS 459.3813*)
1. In order to be granted an exemption by the State Environmental Commission from C.A.P.P., the owner or operator of a facility with a process that is subject to C.A.P.P. pursuant to ***subparagraph (2) of*** paragraph ***(a)*** of subsection 1 of NAC 459.95323 must submit:
(a) A written letter to the Division requesting exemption from C.A.P.P.; and
(b) ***A list indicating that the recommendations developed pursuant to subsection 8 of NAC 459.95414 have been implemented. The list must be certified pursuant to NAC 459.95358.***
2. Not later than 60 calendar days after the Division receives the ***information*** submitted to it pursuant to subsection 1, the Division shall verify ***compliance with paragraphs (a), (b) and (c) of subsection 1 of NAC 459.95486.***
3. Not later than 90 calendar days after the Division receives the ***information*** submitted to it pursuant to subsection 1, the Division shall:
(a) Document its findings concerning ***the verification made pursuant to subsection 2;*** and
(b) Notify the owner or operator in writing ***of the findings made pursuant to paragraph (a).***
4. Once the owner or operator has received notice that the Division has ***verified compliance with paragraphs (a), (b) and (c) of subsection 1 of NAC 459.95486,*** he may petition the State Environmental Commission to become exempt from C.A.P.P. by filing with the Secretary of the State Environmental Commission:
(a) A letter requesting exemption from C.A.P.P.; and
(b) A copy of the findings of the Division made pursuant to subsection 3.
5. Upon receiving the letter and findings from an owner or operator pursuant to subsection 4, the Secretary of the State Environmental Commission shall:
(a) Schedule a review of the petition at the next meeting of the State Environmental Commission; and
(b) Notify the public by publication and the use of public service announcements of the petition.
6. At the hearing, the State Environmental Commission will consider the following to determine whether it will grant the petition:
(a) Whether the causes of any releases have been adequately mitigated to prevent future releases;
(b) Whether the facility has an adequate program in place to maintain the accident prevention program established pursuant to C.A.P.P.;
(c) Whether the Division believes that the exemption should be granted; and
(d) Whether the facility has had an accidental release since becoming subject to C.A.P.P.
7. If the State Environmental Commission:
(a) Grants the exemption, the exemption will become effective on the day following the hearing.
(b) Does not grant the exemption, the Commission will provide the owner or operator with an explanation of the reason the Commission denied the exemption.
8. The owner or operator may reapply for the exemption at any time.

Revalidation

NAC 459.9549 Process hazard analysis. (NRS 459.3818)
1. The revalidation of a process hazard analysis that is required pursuant to NAC 459.95414 must:
(a) Confirm pursuant to NAC ***459.95496, 459.95498 and 459.955*** that the analysis **[**or review**]** is valid for the current process;
(b) ***Determine the status of recommendations from the previous process hazard analysis; and***
(c) Satisfy the requirements of NAC 459.95414.
2. The owner or operator may perform a new process hazard analysis in lieu of revalidating a previous analysis, if:
(a) The process hazard analysis satisfies the requirements of NAC 459.95414; and
(b) All the supporting information, including, without limitation, the process safety information, operating procedures, training program, mechanical integrity program and emergency response program reflect current operations.

NAC 459.95496 Process safety information. (NRS 459.3818)
1. A revalidated process hazard analysis must reflect current process safety information required pursuant to NAC 459.95412. The owner or operator shall document specifically how the accuracy of the process safety information was validated.
2. A revalidated process hazard analysis must reflect the current hazard assessment.

NAC 459.95498 Current procedures and programs. (NRS 459.3818)
A revalidated process hazard analysis must reflect current operating procedures, training programs, maintenance programs and emergency response programs ***required pursuant to NAC 459.95416, 459.95418, 459.95421, 459.9544 and 459.95442. The owner or operator shall document specifically how the accuracy of such information was validated.***

NAC 459.955 Consideration of incidents. (NRS 459.3818)
1. All incidents that had the potential for, or actually resulted in, a release, fire or explosion involving a ***highly hazardous*** substance ***or explosive*** must be considered by the person or team conducting a revalidation of a process hazard analysis**.**
2. The revalidation of the analysis must include, without limitation:
(a) A review of the recommendations that were made as a result of the investigation; and
(b) Confirmation that the recommendations are being implemented in a timely manner.
3. If a deficient element of a prevention program was a contributing factor to an incident, the person or team conducting the revalidation shall make recommendations to correct the deficiency.

Change in Ownership

NAC 459.95512 Requirements. (NRS 459.3818) If a facility with a process that is subject to ***C.A.P.P.*** changes ownership, the new owner or operator shall ***assume responsibility for full compliance*** with the requirements of NRS 459.380 to 459.3874, inclusive, and any regulations adopted pursuant thereto and:
1. If the annual registration required pursuant to NAC 459.95348 is not due, satisfy the requirements for registration set forth in NAC 459.9535 and 459.95358 not later than 14 days after the transfer of ownership; or
2. If the annual registration required pursuant to NAC 459.95348 is due, submit the annual registration.

Management Systems

NAC 459.95516 Development. (NRS 459.3818) The owner or operator of a facility with a process that is subject to ***C.A.P.P.*** shall develop***:***

1. A management system to oversee the implementation of all ***program*** requirements ***and:***

(a) Assign a qualified person to have overall responsibility for the development, implementation and integration of the requirements of C.A.P.P.; or

(b) Create a team with overall responsibility for the development, implementation and integration of the requirements of C.A.P.P. The owner or operator shall document:

(1) The names of the persons who are members of the team; and

(2) The relevant lines of authority for the team by means of an organization chart or similar document.

2. An implementation plan that covers each element of the prevention program and each element of the emergency response program. The implementation plan must define how each requirement of each such element will be implemented at the facility and must provide a system that requires all information and documentation be controlled in a manner which ensures that the current information and documentation is in circulation and in use.

Inspections

NAC 459.9552 Determination of compliance. (NRS 459.3818)

1. The Division ***shall conduct a site inspection pursuant to this section at least once per year for each facility registered pursuant to NAC 459.95348.***

2. The Division may request information from the owner or operator of the facility in advance of any inspection related to compliance with any C.A.P.P. requirement. The Division may require that any information submitted pursuant to this subsection be certified pursuant to NAC 459.95358.

3. Except as otherwise provided in subsection 4, during a site inspection, the Division shall:

(a) Evaluate whether the facility is in compliance with the requirements of its:

(1) Prevention program;

(2) Emergency response program; and

(3) Hazard assessment; and

(b) Validate information submitted by the owner or operator of the facility.

4. The Division is not obligated to perform the evaluation pursuant to paragraph (a) of subsection 3 in its entirety on an annual basis, but may fulfill the requirements of paragraph (a) of subsection 3 over multiple inspections, prioritizing the order of the evaluation by perceived program deficiencies and potential hazard.

5. The Division must document the inspection results in a written report. The report must include, without limitation:

(a) The name of the facility, dates of inspection and the names of facility personnel present;

(b) Processes reviewed and hazardous materials involved;

(c) The findings and conclusions of the inspection; and

(d) The corrective actions required of the owner or operator of the facility.

6. Copies of the report prepared pursuant to subsection 5 must:

(a) Be placed in the facility file, which must be available for public review; and

(b) Be sent to the owner or operator of the facility.

Standards and Codes

NAC 459.95528 Adoption by reference. (NRS 459.3818) The following provisions are hereby adopted by reference:

1. Codes 211112, 32211, 32411, 32511, 325181, 325188, 325192, 325199, 325211, 325311 and 32532 of the ***2002*** version of the N.A.I.C.S. A copy ***of the N.A.I.C.S.*** may be obtained from the National Technical Information Service, 5285 Port Royal Road, Springfield, Virginia 22161, at a cost of ***$49.***

2. *N.F.P.A. 704* ***:*** *Standard* ***System*** *for the Identification of the Hazards of Materials for Emergency Response****, 2001 edition.*** A copy may be obtained from the National Fire Protection Association, ***1 Batterymarch Park, P.O. Box 9101, Quincy, Massachusetts 02269-9101,*** at a cost of ***$28.75.***

3. *N.F.P.A. 30* ***:*** *Flammable and Combustible Liquids Code****, 2003 edition.*** A copy may be obtained from the National Fire Protection Association, ***1 Batterymarch Park, P.O. Box 9101, Quincy, Massachusetts 02269-9101,*** at a cost of ***$38.25.***

4. ERPG-2 of the *Emergency Response Planning Guidelines Series*. A copy ***of ERPG-2*** may be obtained from the American Industrial Hygiene Association, 2700 Prosperity Avenue, Suite 250, Fairfax, Virginia 22031, at a cost of ***$15.***

5. *R.M.P.* ***Guidance for*** *Off-Site Consequence Analysis* ***.*** A copy may be obtained free of charge from the United States Environmental Protection Agency, ***National Service Center for Environmental Publications,*** P.O. Box 42419, Cincinnati, Ohio 45242-2419.

6. N.F.P.A. 70, the ***2002*** version of the *National Electrical Code*. A copy may be obtained from the National Fire Protection Association, ***1 Batterymarch Park, P.O. Box 9101, Quincy, Massachusetts 02269-9101,*** at a cost of ***$65.***

7. 49 C.F.R. § 172.101. A copy of the volume that contains 49 C.F.R. § 172.101 may be obtained from the Superintendent of Documents, P.O. Box 371954, Pittsburgh, Pennsylvania 15250-7954, at a cost of $49. That section is also available, free of charge, from the Government Printing Office at the Internet address <http://www.gpoaccess.gov>.

8. ASME B31.3 - 1999 Process Piping with Addenda. A copy of this standard may be obtained from the American Society of Mechanical Engineers, P.O. Box 2300, Fairfield, New Jersey 07007-2300, at a cost of $255.

9. ASME B31.5 - 2001 Refrigeration Piping and Heat Transfer Components. A copy of this standard may be obtained from the American Society of Mechanical Engineers, P.O. Box 2300, Fairfield, New Jersey 07007-2300, at a cost of $105.

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